

# 2012-2013 Catalog 

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Weaverville, CA 96093
trinity@shastacollege.edu
530-623-2231
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1504 Market Street
Redding, CA 96001
530-339-3606

Shasta College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 10 Commercial Blvd., Suite 204, Novato, CA 94949, TELEPHONE (415) 506-0234, FAX (415) 506-0238. Shasta College is listed as a public community college in the approved list of the Education Directory, Higher Education Part 3, published by the U.S. Office of Education.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version. The online version is updated at the start of registration for each semester and, therefore, should be relied upon as the most up-to-date.

# SHASTA-TEHAMA-TRINITY JOINT COMMUNITY COLLEGE DISTRICT GOVERNING BOARD OF TRUSTEES 

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## MISSION STATEMENT

Shasta College provides students of diverse backgrounds, interests, and abilities with open access to educational and lifelong learning opportunities, thereby contributing to the social, cultural, and economic development of our region. The District offers programs and extensive distance education offerings in general education and transfer curriculum, careertechnical education, and basic skills education where students are provided opportunities to practice and improve critical thinking, effective communication, quantitative reasoning, information competency, community and global awareness, selfefficacy, and workplace skills.

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## ACCURACY STATEMENT

The Shasta-Tehama-Trinity Joint Community College District has made every reasonable effort to ensure that information in this catalog is accurate. Courses and programs that are offered, along with other matter contained herein, are subject to change without notice by Shasta College administration for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the District. The District further reserves the right to add, amend, or repeal any of their rules, regulations, policies and procedures, consistent with applicable laws.

## Institutional Student Learning Outcomes

To support student success, Shasta College has identified the following Institutional Student Learning Outcomes (ISLOs).

## 1. Critical Thinking

Critical thinking is the ability to comprehend, communicate, or engage in problem-solving or strategy-building techniques.

## 2. Information Competency

Information competency is the ability to find, evaluate, use and communicate information in all its various formats.

## 3. Effective Communication

Effective communication is the ability to effectively use written, oral and nonverbal communication.

## 4. Quantitative Reasoning

Quantitative reasoning is the ability to use appropriate mathematical methods.

## 5. Self-Efficacy

Self-efficacy is the confidence and ability to perform the courses of action required to effectively meet personal, social, academic and professional goals.

## 6. Workplace Skills

Workplace skills provide the ability to perform effectively at work.

## 7. Community and Global Awareness

Community and global awareness includes an understanding of community and global issues and cross-cultural awareness.

Board Approved 6/08/11

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## Shasta-Tehama-Trinity Joint Community College District

## Welcome to Shasta College!

Shasta College serves Shasta, Tehama, and Trinity Counties as a comprehensive community college offering programs in a broad range of fields of study to prepare you for new opportunities and challenges.

We at Shasta College pride ourselves on our dedication to students as our first priority. You will have the opportunity to have your own personalized education and career plan. Whether your goal is employment upon graduation or transfer to a four-year university, our desire is to assist you and ensure you know how, at each step, to best steer your own pathway to success.

A decision to enroll at Shasta College is a wise investment of your time, talent and resources. Thousands of successful graduates since 1950 throughout Northern California and the nation attest to their pride in being part of the Shasta College family. We welcome you to that tradition and to a wide new world of opportunities made possible through higher education.

> Joe Wyse
> Superintendent/President

## ¡Bienvenidos a Shasta College!

Shasta College atiende a los condados de Shasta, Tehama, Trinity como un colegio de comunidad integral ofreciendo una gran variedad de programas en varios campos de estudio para prepararte al Nuevo siglo.

En Shasta College nos sentimos muy orgullosos de la dedicación brindada a nuestros estudiantes, siendo esta nuestra primera prioridad. Como estudiante tú tendrás la oportunidad de tener un plan personalizado de educación. Si tu objetivo es conseguir empleo después de graduarte o transferirte a una Universidad, nuestro deseo es asistirte y asegurar que tú sabes como, a cada paso, conducirte en tu propio camino al éxito.

Decidir matricularte en Shasta College es una sabia inversión de tu tiempo, talento y recursos. Miles de exitosos graduados, desde 1950, del norte de California y de la nación dan fe del orgullo de ser parte de la familia de Shasta College. Nosotros te damos la bienvenida a esta tradición y al nuevo mundo de oportunidades que es posible gracias a la educación superior.

Joe Wyse
Superintendente/Presidente

Applications and information should be requested from:
Admissions and Records Office, Shasta College, Administration Building, 11555 Old Oregon Trail, P.O. Box 496006, Redding, CA 96049-6006

Telephone: (530) 242-7650

# Don't forget to visit our website at www.shastacollege.edu 

## Administrative Staff

Superintendent/President Joe WyseAssistant to the Superintendent/President ............................................................................ Theresa Markword
Associate Vice President of Human Resources Laura Cyphers Benson
Associate Vice President of Information Services and Technology Doug Meline
Information Services Technology Supervisor James Crandall
Technology Programmer/Analyst Nicole Chelonis
Technology Support Supervisor John Lutkemeier
Associate Vice President of Student Services/Dean of Students Kevin O'Rorke (Interim)
Dean, Enrollment Services ..... Sandra Hamilton Slane (Interim)
Director, Financial Aid. Connie Barton
Director, Foster and Kinship Care Sheri Wiggins
Director, DSPS/EOPS ..... David Travis (Interim)
Program Director, TRiO - Educational Talent Search Nancy Berkey
Program Director, TRiO - Upward Bound/SSS Sylvia Ruano
Director of Research and Planning Marc Beam
Executive Director, Shasta College Foundation ..... Scott Thompson
Vice President of Academic Affairs Meridith Randall
Dean, Arts, Communication and Social Sciences Ralph Perrin
Dean, Business, Agriculture, Industry and Technology Eva Jimenez
Dean, Economic and Workforce Development ..... Eva Jimenez
Director, SBDC Keli Anthis
Assistant Project Director, SBDC Kathy Wilson
Program Director, BEC ..... Darren Gurney
Program Director, Energy Efficiency Grant Suzanne Clark
Project Coordinator - CalWORKs/Analyst, Capital \& Special Projects ..... Vacant
Dean, Extended Education ..... Thomas Orr
Dean, Health Sciences and University Programs Wanda Spratt
Dean, Science, Language Arts and Math. Frank Nigro (Interim)
Dean, Safety, Physical Education and Consumer Sciences Gary Houser
Athletic Director ..... Craig Thompson
Director, Early Childhood Education ..... Kathleen Tibbals
Director, Fire Technology and EMS Programs ..... Duane Fry (Interim)
Associate Dean, Library Services Janet Albright
Vice President of Administrative Services Morris RodrigueNancy Funk
Director, Food Services Denise Axtell
Director, Physical Plant Services George Estrada
Supervisor, Custodial Services Gregory Wacker
Supervisor, Transportation Department John Moore
Hazardous Materials Compliance Supervisor Dave Freeman
Director, Campus Safety Craig Carmena

## College Calendar

## FALL SEMESTER 2012

Aug. $17 \ldots \ldots \ldots . . . .$. Instructional Improvement Day for Faculty
Aug. $20 \ldots \ldots . . . .$. INSTRUCTION BEGINS - DAY AND EVENING,
ON AND OFF-CAMPUS

Aug. 20 ............. INSTRUCTION BEGINS - DAY AND EVENING, ON AND OFF-CAMPUS
Sept. 3 .............. Labor Day Holiday
Nov. 12 ............. Veterans Day Holiday
Nov. 21 ............. No evening courses (5 PM or later starting time). DAY COURSES HELD AS USUAL.
hanksgiving Holiday

Dec. 22-Jan. 14.. Semester Break

## SPRING SEMESTER 2013



## The College

## A Brief History

In the Centennial year of California and Shasta County (1950), Shasta College opened its first campus. As part of the state's Centennial celebration, President Harry S. Truman spoke at the college's Thompson Field. There were 26 original faculty members.

Shasta College extends its educational, cultural, and recreational facilities and services to all people in Shasta, Tehama, and Trinity Counties, including parts of Lassen, Modoc, and Humboldt Counties, an area that is more than 10,000 square miles, which is larger than the State of Massachusetts. An eight-member Board of Trustees, which includes a non-voting Student Trustee, represents the Shasta-Tehama-Trinity Joint Community College District.

Shasta College was founded in 1948 as part of the Shasta Union High School District. After opening its doors on Eureka Way in the fall of 1950, with 256 day students, Shasta College grew so rapidly that, in 1964, voters approved a bond issue for construction of a 337-acre campus at the main campus location. The present Shasta College main campus was originally a fur and trading center of the Wintu Indians, later owned by a soldier and his family after the Mexican-American War. A state-of-the-art $\$ 1.5$ million Early Childhood Education child care center and instructional facility opened in the fall of 2005. A new 44,000 square foot Health Sciences and University Center opened in the fall of 2007, which houses the college's Dental Hygiene and Nursing Programs. It also serves as host to baccalaureate degree programs offered by both public and private universities.

Shasta College is part of the California Community College system, which is the largest system of higher education in the world, with 112 colleges organized into 72 districts. Research has shown that students who have an A.A. or A.S. degree will make an average yearly salary which is $50 \%$ higher than a person with less than a high school diploma. Also according to that research, students who have an A.A. or A.S. degree will make an average yearly salary which is $24 \%$ higher than a person with only a high school diploma. The college has articulation agreements to facilitate transfer to the University of California and California State University systems, and many private college campuses.

The Shasta College mascot is the Knight. In 1955 the Shasta College Motor Knights Club built a knight with a suit of armor and lance. His name is "Oakey Doaks" (named for a cartoon character of the time).

Because of the diversified goals and needs of its students, Shasta College offers a wide range of programs and services, including counseling, tutoring, financial aid, performing arts and athletic events, student activities, veterans' services, cultura events, lecture series, workshops, and art exhibits. Shasta College has extensive offerings on the Internet and through Interactive Television (ITV). Shasta College also offers instruction and student services at the Downtown Campus, Intermountain Campus, Tehama Campus, and Trinity Campus and each location utilizes ITV and computer-assisted learning to supplement on-site courses.
Fall 2012 marks the $62^{\text {nd }}$ Anniversary of Shasta College, serving the north state with pride and distinction.

## Welcome Everyone!

## Motor Vehicles on Campus

Operation of motor vehicles on the Shasta College campus must be conducted in a manner which ensures the safety of the driver, passengers, pedestrians, and/or any others, and which prevents damage to college property. The college is not responsible for loss of any property or damage to any property sustained by any person parking on campus.

Parking on Campus: PARKING PERMITS ARE REQUIRED TO PARK ON CAMPUS (Redding Main Campus and Tehama Campus). ALL PARKING IS ON A FIRST-COME, FIRST-SERVED BASIS. PARKING PERMITS ARE SOLD WITH NO GUARANTEE OF SPACE AVAILABILITY. Parking on campus is a privilege extended by the Board of Trustees to those who have college-related business Drivers of vehicles on college property shall comply with the rules and regulations of the college. Parking privileges can be withdrawn for violations of parking and traffic regulations. Regulations and review process information are provided online at: http://www.shastacollege.edu/workarea/downloadasset.aspx?id=4229 or by clicking on Resources, then Campus Safety, or may be obtained from Campus Safety at (530) 242-7913. Permits may be obtained at registration or from the Business Office.

Cost of Parking Permit: Refer to the Schedule of Classes or call (530) 242-7913.
Daily Parking Permits are available from parking permit machines in various locations throughout the campus parking lots. These are valid for the day on which the permit is purchased.

Parking permits must be displayed in plain view in the appropriate location according to Parking Regulations or a citation will be issued. There are no exceptions. Should you receive a citation, follow the written instructions on the front of the citation. Restricted parking where regular permits are not valid: 30 minute zones, staff spaces, handicapped spaces (blue) and car pool spaces

Car Pool Parking requires the purchase of a student permit and an additional permit which can be obtained without additional cost through the Security Department.

Enforcement: Campus parking and traffic safety regulations are enforced by Shasta College and the Redding Police Department. Security issues parking citations for violations. For additional information contact campus parking at (530) 242-7913

## Economic and Workforce Development (EWD)

The Economic and Workforce Development (EWD) Division at Shasta College offers a variety of programs, services, and training for businesses, personal and professional growth, nonprofit organizations, and classes for personal enrichment.

- For Businesses, we offer one-on-one consulting services available through the Small Business Development Center (SBDC) at Shasta College. From business start-up, to expanding your business, the SBDC is your one-stop location! In addition, the EWD provides custom developed Business and Employee Training programs to improve your businesses' profitability and operational efficiency.
- The Center for Nonprofit Resources offers grant research facilities, member support, and courses to enhance nonprofit operations. These services provide the nonprofit community with a valuable resource for success.
- We offer a variety of courses for personal and professional development from vocational training in allied healthcare to classes in medical billing and renewable energies. We also offer CEUs for healthcare professionals as well as occupational certification programs.
- We also offer classes for personal enrichment where you can explore and develop new interests and hobbies.

For additional information visit our website at www.shastacollege.edu/ewd Center for Economic \& Workforce Development
2990 Innsbruck
Redding, California 96003
Voice: (530) 242-7630; Fax: (530) 225-8582; Email: ewd@shastacollege.edu

## Crime Statistics

The Annual Shasta College Security Report is provided to help ensure a safe environment for our college community and prospective students and employees. This document contains crime statistics for the previous three years in addition to valuable safety and security information. A complete copy of the Security Report may be obtained from the Security Office located in Room 5015. The report is also available through our Campus Website: http://www.shastacollege.edu/crimestat/ .

## Extended Education

The Extended Education Division of Shasta College is assigned the responsibility to provide access to higher education for residents beyond the traditional patterns of campus-based education and programs. It does so by offering a variety of programs and courses in surrounding communities designed for those who seek to expand their interests, improve or broaden their occupational and professional preparation, or further their degree aspirations.

Classes are held at each of the three campuses listed below as well as other locations throughout the District. Classes are offered in a variety of formats including live instruction and 2-way interactive television (ITV), and many students are now able to complete their degree or certificate without commuting to the main campus. Office hours at each campus are Monday through Thursday, 8:00 a.m. to 9:30 p.m., and Friday, 8:00 a.m. to 4:30 p.m.

Shasta College Tehama Campus
770 Diamond Avenue, Red Bluff, CA 96080
530-529-8980; tehama@shastacollege.edu
Shasta College Intermountain Campus
37581 Mountain View Road, Burney, CA 96013
530-335-2311; intermountain@shastacollege.edu
Shasta College Trinity Campus
30 Arbuckle Court, Weaverville, CA 96093
530-623-2231; trinity@shastacollege.edu
Services available at each campus include admissions assistance, on-site registration and counseling, assessment and orientation, tutoring, and career guidance.

## Field Trips and Excursions Liability Policy

Throughout the semester/school year, the District may sponsor off-campus, extracurricular field trips/excursions. If you choose to participate, be advised tha pursuant to California Code of Regulations Sub-Chapter 5, Section 55220, you have agreed to hold the District, its officers, agents and employees harmless from any and all liability or claims which may arise out of or in connection with your participation in the activity.

## Foundation

The Shasta College Foundation was established in 1995 as a 501(c)(3) non-profit corporation organized by community-spirited citizens to support and benefit the Shasta-Tehama-Trinity Joint Community College District. The Foundation is made up of 45 volunteers representing Shasta, Tehama and Trinity Counties. Its primary purpose is to raise funds to support and benefit Shasta College. The Foundation recognizes community and campus relationships as core to our mission.

Contributions to the Shasta College Foundation take many forms: gifts of cash, gifts in kind, stock or securities, trusts, real estate, gifts in memoriam, wills and bequests.

The Foundation Executive Director is always available to assist donors in establishing scholarships and in making other contributions. Legal counsel is provided to those wishing to make planned gifts. Please write or call:

Scott Thompson, Executive Director<br>Nancy de Halas, Administrative Assistant<br>Shasta College Foundation<br>P.O. Box 496006, Redding, CA 96049-6006<br>(530) 242-7512<br>foundation@shastacollege.edu

## Open Access Policy

Reference: Title 5, Section 51006; Board Policy 5052
All courses, course sections, and classes of the District shall be open for enrollment to any person who has been admitted to the college. Enrollment may be subject to any priority system that has been established. Enrollment may be limited to students meeting properly validated prerequisites and co-requisites, or due to other practical considerations such as exemptions set out in statute or regulation.

## Sexual Violence Prevention and

Education (AB 1088, amends Ed Code 67385.7)
Starting January 1, 2006, post secondary education districts are required to provide to students educational and preventive information about sexual violence, in addition to the sexual harassment information required by Ed Code 66281.5. At Shasta College this information, titled Sexual Assault Policy, is found on page 4 of the Crime Statistics report, posted on the Campus Security webpage:
http://www.shastacollege.edu/crimestat/.

## Transportation

Public transportation is available in our District.

## RABA (Redding Area Bus Authority)

http://www.rabaride.com/
RABA provides rides to over 650,000 people each year, and has been serving the Redding, Shasta Lake and Anderson communities since 1981. Their website shows all of the RABA bus routes, hours of operation, fares and tips on using the service, and additional information including the location of each bus stop along the route. Their Customer Service Center is also available at 241-3877 for all of your route and schedule questions and to purchase tickets and passes.

## TRAX (Tehama Rural Area Express)

http://www.taketrax.com
Fixed route bus service connecting Red Bluff, Corning, Los Molinos, Gerber, Tehama and places in-between. City routes are available in Red Bluff and Corning, and special morning commuter runs are available along the Highway 99E and 99W corridors which connect to city routes. Their website contains information on routes, fares, etc. Special discounted fares are available for seniors, students and the disabled.

## TRINITY TRANSIT

## http://trinitytransportation.org/pg/schedules.php

Trinity Transit is the public transit operator for Trinity County. It operates two fixed-route services in the County: the Weaverville Shuttle and the HayforkWeaverville Bus, and a pilot program service in Lewiston and Trinity Center and between Weaverville and Willow Creek. The Weaverville Shuttle operates hourly within Weaverville, Monday through Friday from 9:00 a.m. to 5:00 p.m. It stops at numerous destinations, including Weaver Creek Senior Apartments, the Senior Center, the Trinity Hospital, Library, Social Services Complex, and the Post Office.

## Unlawful Discrimination Policy

## Compliance Statement

The Shasta-Tehama-Trinity Joint Community College District complies with the California Education Code, Title 5 of the California Code of Regulations, all pertinent titles and sections of the Civil Rights Act of 1964, Title IX regulations, the Education Amendments of 1972, the Rehabilitation Act of 1973, The Americans with Disabilities Act, and all other applicable federal, state, and local laws.

Nondiscrimination
Reference: Board Policy 3410
It is the policy of Shasta-Tehama-Trinity Joint Community College District to provide an environment free of unlawful discrimination. The District is committed to equal opportunity in educational programs, employment, and access to institutional programs and activities.

The District, and each individual who represents the District, shall provide access to its services, classes, and programs without regard to race, religion, color national origin, ancestry, physical or mental disability, medical condition, genetic information, gender, gender identity, gender expression, age, marital status, sexual orientation, or because he or she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics.

The District forbids and will not tolerate any form of discrimination and has enacted administrative procedures to assure equal opportunity and to recognize and eliminate violations of this policy in accordance with Title 5 regulations and those of other agencies that administer state and federal laws regarding nondiscrimination. It is both illegal and prohibited by this policy to retaliate against any individual for filing a complaint or participating in an investigation.

The Superintendent/President shall establish administrative procedures that ensure all members of the college community can present complaints regarding alleged violations of this policy and have their complaints heard in accordance with the Title 5 regulations and those of other agencies that administer state and federal laws regarding nondiscrimination.

## Prohibition of Harassment (including sexual harassment)

## Reference: Board Policy 3430

The District is committed to providing an educational, employment, and business environment that respects the dignity of individuals and groups. All forms of harassment are contrary to basic standards of conduct between individuals and are prohibited by state and federal law, as well as this policy, and will not be tolerated. The District shall be free from sexual harassment and all forms of sexual intimidation and exploitation, including acts of sexual violence. It shall also be free of other unlawful harassment, including that which is based on any of the following statuses: race, religion, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, gender, gender identity, gender expression, age, or sexual orientation of any person, or because he or she is perceived to have one or more of the foregoing characteristics, or based on association with a person with one or more of perceived or actual conditions.
The District seeks to foster an environment in which all employees and students feel free to report incidents of harassment without fear of retaliation or reprisal. Therefore, the District also strictly prohibits retaliation against any individual for filing a complaint of harassment or for participating in a harassment investigation. Such conduct is illegal and constitutes a violation of this policy. All allegations or retaliation will be swiftly and thoroughly investigated. If the District determines that retaliation has occurred, it will take all reasonable steps within its power to stop such conduct. Individuals who engage in retaliatory conduct are subject to disciplinary actions, up to and including termination or expulsion.

Any student or employee who believes that he or she has been harassed or retaliated against in violation of this policy should immediately report such incidents by following the appropriate procedures. Supervisors are mandated to report all incidents of harassment and retaliation that come to their attention.

This policy applies to all aspects of the academic environment, including but not limited to classroom conditions, grades, academic standing, employment opportunities, scholarships, recommendations, disciplinary actions, and participation in any community college activity. In addition, this policy applies to all terms and conditions of employment, including but not limited to hiring, placement, promotion, disciplinary action, layoff, recall, transfer, leave of absence, training opportunities and compensation.

To this end the Superintendent/President shall ensure that the institution undertakes education and training activities to counter discrimination and to prevent, minimize and/or eliminate any hostile environment that impairs access to equal education opportunity or impacts the terms and conditions or employment.

Administrative procedures have been established to define harassment and to investigate and resolve complaints regarding harassment and unlawfu discrimination, which shall be widely published and available to administrators, faculty, staff and students. All participants are protected from retaliatory acts by the District, its employees, students, and agents.

Employees who violate this policy and related procedures may be subject to disciplinary action up to and including termination from employment. Students who violate this policy and related procedures may be subject to disciplinary measures up to and including expulsion.

Continued on next page...

Unlawful Discrimination Policy (continued):
Contact Information
The Human Resources Office has responsibility to ensure fair and equitable treatment in all programs including issues dealing with physical access, individual barriers, and removal of architectural barriers for mobility impaired students. The unlawful discrimination policy is available at the Human Resources Office and online. The Office is located in the Administration Building, Room 121, (530) $242-$ 7640. Students with complaints of discrimination related issues may contact the Associate Vice President of Human Resources at (530) 242-7649, or the Dean of Students at (530) 242-7622. For further information regarding Section 504 of the Rehabilitation Act, contact the Section 504 Coordinator, (530) 242-7649, or the Dean of Students, (530) 242-7622, Shasta College, 11555 Old Oregon Trail, P.O. Box 496006, Redding, CA 96049-6006,

Declaración de Cumplimiento
El Distrito del Shasta-Tehama-Trinity Joint Community College (Shasta College) cumple con el Código Educacional de California, el Titulo 5 del Código de Regulación de California, todos los Titulos y Secciones pertinentes del Acto de Derechos Civiles de 1964, el Titulo IX de los Enmiendas de Educación de 1972, el Acto de Rehabilitación de 1973, la Ley para estadounidenses con Incapacidades, y todas las demás leyes estatales y federales pertinentes.

## No Discriminación

Es la póliza del Distrito de Shasta College de mantener un ambiente libre de discriminación ilegal. El Distrito se compromete a dar oportunidades iguales de educación, empleo, e igualdad de acceso a los programas y actividades institucionales.

El Distrito, y cada persona quien lo representa, reconocen la obligación que tiene de proveer acceso a los servicios, clases y programas, sin discriminación por razones de origen nacional, religión, edad, género, raza, color, ascendencia, orientación sexual, estado civil, o incapacided fisica o mental, o debido a que una persona es percibida de tener una o mas de las caracteristicas descritas anteriormente. El Distrito prohibe cualquier forma de discriminación y fomenta procedimientos administrativos que reconocen y ponen fin a la discriminación de acuerdo con el Titulo 5 y las reglas y estatutos tanto del estado de California como las leyes federales. Es ilegal y prohibido tomar algun tipo de represalia en contra de la persona que presenta la queja o participa en la investigación de acceso a los programas y actividades institucionales.

## Informacion de Contacto

La Oficina de Recursos Humanos es la entidad responsable de asegurar el tratamiento justo y equitativo. La Póliza de Discriminación llegal está disponible en la Oficina de Recursos Humanos y en Internet. La Oficina está localizada en el edificio de Administración, salón 121, (530) 242-7640.
Estudiantes que desean presentar una queja, deberian de ponerse en contacto con en la Oficina de Recursós Humanos (530) 242-7640, o con el Decano para Estudiantes, (530) 242-7622. Para mas información sobre el Acto de Rehabilitación póngase en contacto con Coordinadora de Seccion 504 del Acto de Rehabilitacion (530) 242-7649, o con el Decano para Estudiantes, (530) 242 7622 Shasta College, 11555 Old Oregon Trail, P.O. Box 496006, Redding CA 96009-6006.

## Chapter 2 - Admission and Enrollment Information

## Admissions

Anyone 18 years of age or older or anyone under 18 who has graduated from high school or passed the California High School Proficiency Exam and is a resident of the district may be admitted to Shasta College classes.

## Auditing a Course

## Purpose:

1. Auditing is to allow students to participate in class activities beyond the course repetition limit; and
2. Auditing is to allow students to repeat a course with the intent of upgrading needed skills or reviewing course content.

## Eligibility:

1. Students must be eligible for admission to the college as regularly enrolled students.
2. Students may audit classes only when they have exhausted repetition opportunities for the course.
3. Students must meet course prerequisites; and
4. Priority in class enrollment shall be given to students desiring to take the course for credit towards a degree or certificate. (Education Code Section 76370(d)).
Fees:
5. The fee for auditing a class is $\$ 15.00$ per unit, per semester (Education Code Section 76270(a)). Material fees, if applicable, are payable with audit fees upon submitting the approved application. The audit fee is non refundable; and
6. Students enrolled in classes to receive credit for ten or more semester credit units shall not be charged a fee to audit three or fewer units per semester.

## Procedures:

1. Verification of eligibility from Admissions and Records Office.
2. Instructor's signature of approval on audit form.
3. Dean of the Division's signature of approval on audit form.
4. Return of approved audit form to Admissions and Records Office within $\mathbf{7}$ days with payment of all fees.

## Continuing Students

CONTINUING STUDENTS and RETURNING STUDENTS may register as described in the current Schedule of Classes. Students planning to enroll in math or English classes are advised to take the appropriate assessment test and consult with a counselor before registering. See "Assessment Center" in the current Schedule Supplement for details on where and when assessment tests are given.

## Coursework - Acceptance of Upper Division Work

Shasta College will accept coursework completed at the upper division level under the following conditions:

- The course must have been completed at a regionally accredited college or university.
- The course must be deemed comparable to a Shasta College course by the faculty in the discipline, or an appropriate designee, or an articulation agreement. Upper division courses (or graduate level courses) which require attainment of the lower division course competencies may also be accepted.
- The upper division course may be used to satisfy a Shasta College major requirement, an A.S. degree general education requirement, or a prerequisite.
- Courses will be accepted for subject credit only. Unit credit will not be awarded toward the 60 units required for the degree. Upper division courses will not be used to certify CSU GE or IGETC requirements.
- For the purposes of ADN or Dental Hygiene prerequisites, the grades earned will be calculated in the same manner as those transferred from another regionally accredited college or university.


## Dropping a Class Without Record

Students may drop a class and have no notation appear on their transcripts through the census date of each class. IT IS THE STUDENT'S RESPONSIBILITY TO DROP CLASS(ES). Forms are available from Admissions and Records, Extended Education sites, or by mail. Students can drop a class in person at Admissions and Records or Extended Education sites, or online through MyShasta. If a student intends to drop a class and stops attending but fails to file the necessary forms, a failing letter grade may be assigned by the instructor. Students may be dropped by the instructor based on excessive absences from a class so long as the instructor has announced attendance criteria.

## First-Time Students

## MATRICULATION SERVICES

SUCCESS BEGINS WITH A PLAN! The college has found that students who have supplied transcripts, participated in English and math assessments, attended an orientation and discussed their educational goals with a counselor significantly improve their performance in college. We call this process "matriculation."
FIRST-TIME STUDENTS are STRONGLY URGED to take advantage of the matriculation services. Those who do will be eligible for "priority registration."

Participation in matriculation services is OPTIONAL for the following students. If you fall into one of these categories, contact the Admissions and Records Office for appropriate registration information.

1. Students who have received a full array of matriculation services at another California community college;
2. Students who plan to enroll only in courses having no English and/or math skill requirements/prerequisites;
3. Students who plan to enroll in fewer than 6 units and who have "personal interest," advancement in their current jobs, or maintenance of a certificate or license as their goals;
4. Students who have completed an Associate or higher degree and are not pursuing a program or degree objective at Shasta College; or
5. Students who have completed 30 or more semester units at another regionally accredited college or university and are not pursuing a program or degree objective at Shasta College.

ALL OTHER FIRST-TIME STUDENTS should participate in matriculation services. The matriculation process consists of:

1. Application: This starts the process! Fill out an online application or turn one in to the Admissions and Records Office or Extended Education campus.
2. Records: Arrange to have official transcripts of high school and previous college work sent to Shasta College. These are important for counseling and program planning. Transcripts sent to Shasta College from other regionally accredited colleges and/or educational institutions at the request of a student become part of the student's permanent file and are not duplicated nor distributed.
3. Assessment Testing: This service provides students with information that will help them to make appropriate selections of major programs and courses. Reading, writing, and mathematical skill assessment tests are offered to all students at a variety of times and locations on a walk-in basis. See the section titled, "Assessment Center" in the current Schedule Supplement for details. Note: Qualifying scores from approved tests taken within the last two years at accredited institutions and sent to Shasta College may exempt students from having to take Shasta College assessment tests.
4. Orientation: The orientation program provides new students an opportunity to meet with a counselor and register for courses.
A. Counseling: Counselors provide information about the college and offer academic, transfer, career and personal counseling.
B. Registration: Students who participate in services 1 through 4 will be given "priority registration" status. Information on the following is also provided at orientation: vocational and certificate programs; transfer requirements; financial aid; Student Services Programs; student activities; learning and health services; and an optional campus tour. Please contact the Assessment Center at (530) 242-7751 to sign up or receive additional information on orientation times and locations.

Students wishing to appeal any component of the matriculation process should contact the Director of Admissions and Records at (530) 242-7659.

## FOLLOW-UP COUNSELING

Throughout the semester, counselors are available to assist students in planning and achieving their educational and career goals. Services are available on an appointment basis. Call the Counseling Center at (530) 242-7724 or go to http://www.shastacollege.edu/counselingappointments/.

## ASSESSMENT TEST INFORMATION

Location: Building 100, Room 101-102
All first-time non-exempt students will need to take the Reading, Writing, and Math Assessment. At the time of assessment, all students must provide photo identification (i.e., driver's license, student body card, passport), know their social security number, and have an application on file at Admissions and Records.

First-Time Students (continued):
The Assessment Center in Room 101/102 in the 100 Building is open Monday through Friday (refer to http://www3.shastacollege.edu/assessments/ for information on hours). No appointment is needed. Limited evening assessments are also available. Seating is limited and available on a first come, first served basis. The assessments are on computers. Students should arrive at least two hours prior to closing and plan for approximately $1 \frac{1}{2}$ hours to complete all three sections. Assessments are available at Extended Education campuses by appointment only.

Students with disabilities should contact Disabled Students Programs and Services at (530) 242-7790 for information and assessment accommodations. English-as-a-Second Language students should take the ESL Assessment Exam.

## International Students

International students must file: an international student application; proof of English competency; health history, including evidence of polio immunization shots or Sabin Oral vaccine, medical statement of immunization against measles, and a certificate of freedom from active tuberculosis; a financial support statement; verification of personal medical insurance coverage; and high school and college transcripts.

International students who will be attending pursuant to an F-1 visa must submit all required documentation prior to issuance of form 1-20 by the District. Students must meet resident determination, which includes a student visa from their residence outside of the U.S., or a U.S. visa that permits entry solely for a temporary purpose.

TOEFL (Test of English as a Foreign Language)
IELTS (International English Language Testing System)
STEP (Society for Testing English Proficiency)
English competency is demonstrated by the following scores:

| TOEFL paper-based | 500 or above |
| :--- | :--- |
| TOEFL internet based | 61 or above |
| TOEFL computer-based | 173 or above |
| IELTS | Band 5.0 or above |
| STEP | Grade 2A or above |

Students may be accepted with the following scores with the stipulation that they enroll in ESL coursework and maintain full-time status (minimum 12 units) as per ICE regulations:

| TOEFL paper-based | $450-499$ |
| :--- | :--- |
| TOEFL internet-based | $45-60$ |
| TOEFL computer-based | $133-172$ |
| IELTS | Band 4.5 |
| STEP | Grade 2 |

Subsequent semester placement into academic courses will be based on ESL assessment or the TOEFL score.

International students who score below the minimum required ESL levels will not be accepted.

International students considered citizens or residents of a foreign country will pay, in addition to in-state enrollment fees, out-of-state tuition at the time of enrollment.

International students applying for the fall semester must complete their applications by June 1. Students applying for the spring semester must complete their applications by November 1. Incomplete applications will be redirected for the following semester admission consideration. At the end of one year from initial application the files of students who do not enroll are destroyed.

International students wishing to attend Shasta College should direct their questions and applications to the Dean of Students, Rm. 2308 or the Admissions and Records Office. http://www.shastacollege.edu/internationalstudents

## Prerequisites, Corequisites, Limitations on Enrollment

 and Advisories
## FREQUENTLY ASKED QUESTIONS

What is an "advisory on recommended preparation"?
Advisories are intended to identify skills which will broaden or deepen a student's learning experience, but without which the student can still succeed in the course. The college does not block enrollment in a course for lack of advisory skills.
Where can Ifind advisories for each course?
If a class has an advisory, it will be stated as part of the course description in the Catalog, and will be listed with the course in the Schedule of Classes.

What is a "limitation on enrollment"?
All courses are open to enrollment to any student who has been admitted to the college, with the following exceptions. Title 5 Section 58106 allows the college to limit enrollment in specific courses or programs by using: 1)
prerequisites and corequisites; 2) health and safety considerations; 3) practical considerations such as facilities limitations, faculty availability and funding limitations; 4) registration systems such as a first-come-first-served, or priority system; 5) statutory, regulatory, or contractual requirements; 6) auditions and tryouts for intercollegiate competition, honors, or public performances courses, 7) blocks of courses for cohorts of students.

NOTE: Shasta College enforces limitations on enrollment.
How do I know which classes have limitations on enrollment?
If a class has a limitation on enrollment, it will be specifically stated as part of the course description in the Catalog, and will be listed with the course in the Schedule of Classes.

## What is a "prerequisite" or "corequisite"?

"Prerequisite" means a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program. (Title 5, Section 55200(a)) Such a condition of enrollment can be a course or other preparation a student must have before being permitted to enroll in a target course. Prerequisites provide the student with knowledge and/or a set of skills that substantially increase a student's success. For example: Introduction to Managerial Accounting (ACCT 4) has a prerequisite of Introduction to Financial Accounting (ACCT 2) with a grade of " $C$ " or higher.

There are two types of corequisites: two-way corequisites and one-way corequisites. A "two-way" corequisite is when two (or more) courses are so intertwined that neither course stands alone. A student would not have a reasonable chance to be successful in either course without being concurrently enrolled in both courses. A "one-way" corequisite is when one of the courses depends on the content of the other course, but not viceversa. Here, only one course would list the other as a corequisite. Often, with one-way corequisites, if you have previously completed the corequisite course, you may be qualified to enroll in the target course.

Why does Shasta College enforce prerequisites and corequisites? We are legally required to enforce prerequisites. The Shasta College faculty has carefully selected prerequisites by evaluating the skills and concepts needed for success in a target course. They are intended to ensure that a student has a reasonable chance for success. For these reasons, enforcement of prerequisites is in the interest of all students.

## How can I satisfy a Prerequisite?

There are three ways you can satisfy a prerequisite at Shasta College.

1. You received a grade of $C$ or higher in the prerequisite course at Shasta College.
A. If you completed the prerequisite course with a grade of C or higher, you will be allowed to enroll in the target course (as long as space is available).
B. If you are currently attending the prerequisite course at the time of registration, you will be allowed to conditionally enroll in the target course for the following semester or summer session (as long as space is available). However, when grades are submitted at the end of the semester, if you did not receive a grade of $C$ or higher in the prerequisite course, you will be dropped from the target course.
2. You satisfied the prerequisite through Course Equivalency. There are three ways to satisfy a prerequisite through Course Equivalency: 1) You received a grade of $C$ or higher in an equivalent course at another college, 2) You have a qualifying score on the AP Exam, or 3) You received CLEP credit for the prerequisite course. (For further information about AP Exam scores and CLEP credit, see a counselor, or refer to the Catalog.)
If you believe you have satisfied the prerequisite through Course Equivalency, then before registration, you should contact Admissions and Records staff, who will direct you through the Course Equivalency Procedure. It is your responsibility to provide supporting documentation, such as transcripts and course description(s) from your previous college(s). You will be allowed to enroll conditionally in the target course for ten working days. If, at the end of ten working days, you cannot provide documentation that you have met the prerequisite through Course Equivalency, then you will be dropped from the course.
3. You satisfied the prerequisite through Multiple Measures. Shasta College recognizes that you may have gained the prerequisite skills for some courses by means other than the two mentioned above. For example, you may have completed high school courses that covered the same topics as the prerequisite course. Or, perhaps you gained the prerequisite skills through work experience. Whatever the means, if you have gained skills that are equivalent to those that you would get by taking the prerequisite course at Shasta College, you should take your supporting documentation to a Shasta College counselor before you try to register. The counselor will direct you through the Multiple Measures Procedure.

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Prerequisites, Corequisites, Limitations on Enrollment and Advisories (cont.):
Note: If you are attempting to register in a course that has Math, English or Chemistry as a prerequisite, then part of the Multiple Measures Procedure might include taking an Assessment Test at the Assessment Center. You are free to take the Assessment Test before you see your Counselor.
Note: Because you will be unable to enroll in the target course until a counselor determines that you have satisfied the prerequisite through Multiple Measures, it is in your best interest to see a counselor before attempting to register for the course.
Note: If you have a disability and believe that you could be successful in the class with reasonable accommodations then see the Counselor for Disabilities, or Learning Disability Specialist, (530) 242-7790, before attempting to register for the course.

## What is a Placement Level Number?

In some cases, such as in math and English, the prerequisite is stated in terms of a Placement Level. Your Placement Level is a number that is based on many factors which may include high school course work and Assessment Test scores. You will be assigned a Placement Level after completion of the Course Equivalency and/or Multiple Measures process.

Can I challenge a prerequisite or corequisite?
Yes, you can. The five grounds for a student to challenge a prerequisite or corequisite are:

1) The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite
2) The prerequisite or corequisite has not been established in accordance with the district's process for establishing prerequisites and corequisites
3) The prerequisite or corequisite is in violation of Title 5
4) The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner
5) The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or corequisite course has not been made reasonably available, or accessible. For a full description see Title 5, Section 55201(f).
If you believe you have grounds for filing a challenge, go to the Office of Admissions and Records for information on the Prerequisite Challenge Procedure. If you choose to file a challenge, you have the responsibility of showing that grounds exist for the challenge.

Note: If you are citing reason \#1 as the basis for challenging the prerequisite/corequisite, you must first have failed to meet the prerequisite/corequisite through the Multiple Measures Procedure. You should seek advice regarding the challenge from a Counselor.

## PREREQUISITE/COREQUISITE CHALLENGE PROCEDURE

The student will obtain a Prerequisite/Corequisite Challenge Form at the Admissions and Records Office. Academic Affairs will retain documentation of Board Policy and Title 5 regulations regarding prerequisite/corequisite challenges. A student may review this information prior to submitting a Prerequisite/Corequisite Challenge Form. A student who chooses to challenge a prerequisite or corequisite may do so for any of the following reasons:

1. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite;
2. The prerequisite or corequisite has not been established in accordance with the district's process for establishing prerequisites and corequisites;
3. The prerequisite or corequisite is in violation of Title 5;
4. The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner;
5. The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or corequisite course has not been made reasonably available, or accessible;

If a student is citing reason \#1 as the basis for challenging the prerequisite/corequisite, the student must first have failed to meet the prerequisite/corequisite through the Multiple Measures Procedure.
A statement of specific skills and abilities needed to enter the class for which the challenge is being issued will be made available to the student through the Office of Academic Affairs, Room 115, on any workday.
The student must complete a Prerequisite/Corequisite Challenge Form. The student must attach a completed and signed Multiple Measures Form to the Prerequisite/Corequisite Challenge Form. The student must return these forms along with the other supporting documentation to the Director of Admissions and Records. The student has the obligation to provide satisfactory evidence that the challenge should be upheld. Without supporting documentation, the application for a challenge will be considered incomplete and the challenge will be denied. When a complete application is filed, the Director of Admissions and Records will forward the Prerequisite/Corequisite Challenge Form and supporting documentation to the appropriate Academic Division Office. The Division staff will arrange a Challenge Hearing.
If the challenge form is submitted during the period when the student is eligible to register for the course, and if space is available, then the student will be conditionally enrolled in the target course until resolution of the challenge is complete.
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Prerequisite/Corequisite Challenge Procedure (continued):
Two or more faculty members will conduct the Challenge Hearing. If possible, the faculty members will be from a discipline closely related to the target course. The student will have the right to attend and speak at the Challenge Hearing. Staff from the appropriate Academic Division Office will attempt to notify the student regarding the time and location of the Challenge Hearing at least one business day prior to the start of that hearing. The results of the Challenge Hearing will be documented and forwarded to the student and to the Admissions and Records Office within five business days from the date that the challenge was filed with the Director of Admissions and Records. If the college has not made a decision within five working days then the student's challenge is upheld and the Admissions and Records Office will allow the student to enroll in the course.

If a student is citing reason \#2, \#3, \#4 or \#5 as the basis for challenging the prerequisite/corequisite, the student must submit a completed Prerequisite/ Corequisite Challenge Form along with supporting documentation to the Vice President of Academic Affairs in the Office of Academic Affairs, Room 115.

The student has the obligation to provide satisfactory evidence that the challenge should be upheld. Without supporting documentation, the application for a challenge will be considered incomplete and the challenge will be denied. When a complete application is filed, the Vice President of Academic Affairs will conduct a Challenge Hearing. This hearing will include as voting members the Vice President of Academic Affairs, one faculty from the Curriculum Council, and one other faculty, preferably from a discipline closely related to the target course.

The student will have the right to attend and speak at the Challenge Hearing. Staff from the Office of Academic Affairs will attempt to notify the student regarding the time and location of the Challenge Hearing at least one business day prior to the start of that hearing. The results of the Challenge Hearing will be documented and forwarded to the student and to the Admissions and Records Office within five business days from the date of the hearing. If the college has not made a decision within five working days then the student's challenge is upheld and the Admissions and Records Office will allow the student to enroll in the course.

Note 1: Students who submit a Prerequisite/Corequisite Challenge Form claiming that a specific disability is a factor in their challenge rationale must forward a copy of the Prerequisite/Corequisite Challenge Form to the Disability Resource Center. The Disabled Students Programs and Services Office will determine if accommodations or academic adjustments are warranted.

Note 2: Students who initiate the challenge procedure during registration may obtain the Prerequisite/Corequisite Challenge Form at the registration site and submit the completed form along with supporting documentation at that site. If space is available, the student will be provisionally enrolled in the target course until resolution of the challenge is complete. Staff at the registration site will time-stamp the form and forward it to the Director of Admissions and Records, or to the Vice President of Academic Affairs as appropriate. The Challenge Procedure will then proceed as outlined above.

## Registration and Related Fees

1. Enrollment Fee: Refer to current class schedule or visit the Shasta College website.
2. Student Health Fee: Refer to current class schedule or visit the Shasta College website.
3. Campus Center Fee: Refer to current class schedule or visit the Shasta College website.
4. Out-of-State Tuition: Refer to current class schedule or visit the Shasta College website.
5. Day and evening parking fee: Refer to current class schedule or visit the Shasta College website (Campus Safety).
6. Student Representation Fee (Voluntary): Refer to current class schedule or visit the Shasta College website.
7. Student Events and Activities Fee (Voluntary): Refer to current class schedule or visit the Shasta College website.

NOTE: Fees are subject to change. The fee schedule is published each semester in the Schedule of Classes.
Instructions for submitting written request for Shasta College Transcript:
Beginning with initial enrollment, each student is allowed two (2) free official transcripts or enrollment verifications; each one thereafter is $\$ 5.00$ (check or money order payable to Shasta College) enclosed with a written request. Allow 10 business days from date request is received by the Admissions and Records Office for processing. If the student has an earlier deadline, please indicate clearly on the request if it is to be considered a RUSH. An additional fee of $\$ 10.00$ will be charged for each RUSH TRANSCRIPT REQUEST. A

RUSH TRANSCRIPT REQUEST is defined as a request that specifies immediate action outside our normal processing time. Upon payment of this additional fee, we guarantee that the RUSH TRANSCRIPT REQUEST will be processed within two business days from the date the request is received by our office.* Should the RUSH TRANSCRIPT REQUEST be one of the first two free transcripts and/or enrollment verifications to be provided in accordance with Education code Section 76223, the student will be charged $\$ 10.00$ for the rush processing component of the request.
*Contingent upon availability of grades.
Mail written request (including student's signature) with payment (if necessary) to: Shasta College Admissions and Records Office, ATTN: Transcript Requests, P.O. Box 496006, Redding, CA 96049-6006.

Students may obtain official or unofficial copies of their Shasta College transcript by contacting the Admissions and Records Office. Unofficial transcripts are available through MyShasta.

## REFUNDS

The enrollment fee is refundable if a class is dropped during the first two weeks of the semester or the first $10 \%$ of the class (subject to change for short-term classes). IT IS THE STUDENT'S RESPONSIBILITY TO DROP CLASS(ES). The Student Health Fee and the Campus Center Fee is refundable if a student withdraws from college during the first two weeks of instruction (subject to change for short-term classes). Contact the Admissions and Records Office for the Out-of-State Tuition refund policy. Refunds will be mailed each month. Keep your address current with the Admissions and Records Office.

Students who are awarded a Board of Governors Grant Fee Waiver (BOGFW) after they have paid their enrollment fees will be reimbursed only for the semester in which they are granted a BOGFW. The BOGFW will not be applied retroactively to prior semesters.

REFUNDS FOR NON-RESIDENT TUITION IS PRORATED AS FOLLOWS:

| Prior to and during first week of instruction | $100 \%$ |
| :--- | :--- |
| During second week class instruction | $75 \%$ |
| During third week class instruction | $50 \%$ |

$\begin{array}{ll}\text { During third week class instruction } & 50 \% \\ \text { During fourth week class instruction } & 25 \%\end{array}$
After fourth week of class meetings NO REFUNDS WILL BE GIVEN
*Non-Resident tuition refunds for classes less than a full-term length will be prorated according to the above schedule.
***Shasta College reserves the right to change fees and related refund policy without notice. ***

## Residency

Non-Residents: A non-resident student is one who does not have residence in the state of California for more than one year immediately preceding the residence determination date. Residence is that location with which a person is considered to have the most settled and permanent connection; it is also that place where that person intends to remain, and during absences, intends to return. Residence results from the union of physical presence with objective evidence that the intent is to remain at that place for an indefinite period of time. A nonresident student must pay out-of-state tuition at the time he/she registers. Once classified as a nonresident, a student must apply to the Admissions and Records Office for reclassification as a resident.

## Special Admits

## SPECIAL PART-TIME ENROLLMENT (FORMERLY CONCURRENT

 ENROLLMENT).A high school student wishing to enroll in Shasta College classes must have the permission of his/her high school principal and follow instructions detailed on the form. Forms are available at the local high schools. Advance approval for all special admit students ( K -12th grade) is required by the Director of Admissions and Records before registration will be allowed. All special admit students should review college assessment test requirements as noted on the reverse side of the concurrent enrollment form. Check with the Admissions and Records Office for specific details. Shasta College prohibits the release of information without the written consent of the student; allows course content that is not altered for concurrent students and is intended for adults; accepts no responsibility for an extraordinary supervision of concurrently enrolled students; and assumes no responsibility for the student's class selection.

## Veterans Educational Benefits

Please see Chapter 8 - Services for Students, Special Programs and Student Life for details.

# California Nonresident Tuition Exemption Request 

## For Eligible Califormia High School Graduates

 SHASTA COLLEGE ADMISSIONS AND RECORDS OFFICE - PO Box 496006 - Redding, CA 96049-6006Note: This form is accepted by all California Community Colleges and all Universities in the both the University of California and California State University systems.

Complete and sign this form to request an exemption from Nonresident Tuition. You must submit any documentation required by the College or University (for example, proof of high school attendance in California). Contact the California Community College, University of California, or California State University campus where you intend to enroll (or are enrolled) for instructions on documentation, additional procedures and applicable deadlines.

## ELIGIBILITY:

I, the undersigned, am applying for a California Nonresident Tuition Exemption for eligible California high school graduates at (specify the college or university) $\qquad$ and I declare the following:

## Check YES or NO boxes:

$\square$ Yes $\square$ No

I have graduated from a California high school or have attained the equivalent thereof, such as a High School Equivalency Certificate, issued by the California State GED Office or a Certificate of Proficiency, resulting from the California High School Proficiency Examination.I have attended high school in California for three or more years.
Provide information on all school(s) you attended in grades 9-12:

| School | City | State | Dates: |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | From - Month/Year | To - Month/Year |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Documentation of high school attendance and graduation (or its equivalent) is required by the University of California, the California State University and some California Community Colleges. Follow campus instructions.

## Check the box that applies to you -- check only one box:

$\square \quad$ I am a nonimmigrant alien as defined by federal law. [Nonimmigrant aliens have been admitted to the United States temporarily and include, but are not limited to, foreign students (persons holding $F$ visas) and exchange visitors (persons holding J visas).]
OR
$\square \quad$ I am NOT a nonimmigrant alien. [U.S. citizens, permanent residents, or aliens without lawful immigration status, among others, should check this box.]

## AFFIDAVIT:

I, the undersigned, declare under penalty of perjury under the laws of the State of California that the information I have provided on this form is true and accurate. I understand that this information will be used to determine my eligibility for the nonresident tuition exemption for eligible California high school graduates. I hereby declare that, if I am an alien without lawful immigration status, I have filed an application to legalize my immigration status or will file an application as soon as I am eligible to do so. I further understand that if any of the above information is untrue, I will be liable for payment of all nonresident charges from which I was exempted and may be subject to disciplinary action by the College or University.

| Print Full Name (as it appears on your campus student records) | Campus/Student Identification Number |
| :--- | :--- |
| Print Full Mailing Address (Number, Street, City, State, Zip Code) | Email Address (Optional) |
|  | Phone Number (Optional) |
| Signature | Date |

RETURN COMPLETED FORM TO SHASTA COLLEGE ADMISSIONS AND RECORDS OFFICE FOR APPROVAL

# California Nonresident Tuition Exemption <br> For Eligible California High School Graduates (The law passed by the Legislature in 2001 as "AB 540") 

## GENERAL INFORMATION

Any student, other than a nonimmigrant alien, who meets all of the following requirements, shall be exempt from paying nonresident tuition at the California Community Colleges, the University of California, and the California State University (all public colleges and universities in California).

- Requirements:
- The student must have attended a high school (public or private) in California for three or more years.
- The student must have graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency exam).
- An alien student who is without lawful immigration status must file an affidavit with the college or university stating that he or she has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.
- Students who are nonimmigrants [for example, those who hold F (student) visas, B (visitor) visas, etc.] are not eligible for this exemption.
- The student must file an exemption request including a signed affidavit with the college that indicates the student has met all applicable conditions described above. Student information obtained in this process is strictly confidential unless disclosure is required under law.
- Students eligible for this exemption who are transferring to another California public college or university must submit a new request (and documentation if required) to each college under consideration.
- Nonresident students meeting the criteria will be exempted from the payment of nonresident tuition, but they will not be classified as California residents. They continue to be "nonresidents."
- AB540 does not provide student financial aid eligibility for undocumented alien students. These students remain ineligible for state and federal financial aid.


## PROCEDURES FOR REQUESTING THIS <br> EXEMPTION FROM NONRESIDENT TUITION

California Community Colleges: Complete the form on the reverse. Submit it to the Admissions Office at the community college where you are enrolled or intend to enroll. You may be required to submit additional documentation. Call the college Admissions Office if you have questions.

University of California: The University of California (UC) system has its own nonresident tuition exemption application and affidavit form, but it will accept the exemption request form used by the California Community Colleges and the California State University. Your campus has established deadlines for submission of exemption requests; however, requests are not to be submitted until you have been admitted to a UC campus. Some students, such as transfer, graduate, and professional students, also must submit their official high school transcripts; check your campus for specific instructions. Once you are determined to be eligible for the exemption, you will continue to receive it as long as you fulfill the eligibility requirements or until the University no longer offers this exemption. The exemption covers the Nonresident Tuition Fee and the Educational Fee differential charged to nonresident students. Applying for the exemption does not alter your responsibility to pay by the campus deadline any nonresident tuition and associated fees that may be due before your eligibility is determined. For campus-specific instructions regarding documentation and deadline dates, contact the campus Office of the Registrar.

California State University: Complete the form on the reverse. Contact the Office of Admissions and Records at the CSU campus where you are enrolled or intend to enroll for instructions on submission, deadline information, and additional requirements. You will be required to submit final high school transcripts and appropriate records of high school graduation or the equivalent, if you have not done so already. Call the Office of Admissions and Records at the campus if you have questions.

Instructions for Shasta College Students: Please submit an official copy of your high school transcript documenting three years of attendance AND proof of your high school graduation OR a copy of your G.E.D. or California Proficiency Certificate. Any questions should be directed to the Shasta College Admissions office, ATTN: Residency Technician at (530) 242-7664.

## Chapter 3 - Finance

## Debts Owed to the College

Students who fail to comply with College rules or regulations, return property owned by the College, pay debts owed to the College, or pay for damaged College property may not be allowed to register, receive degrees or certificates, have transcripts forwarded, receive enrollment verifications, and/or receive other services related to student records. When the student has cleared the obligation with the College, the impoundment of records will be removed.

## Financial Aid for Enrollment Fees

If you are a California resident, you may qualify for a Board of Governors fee waiver (BOGFW) to cover your enrollment fee. There are three ways to qualify for enrollment fee assistance:

1. For 2012-13, if you fall within these income levels:

| Number in Household <br> (including yourself) | 2011 Total Family Income <br> (Adjusted Gross Income |
| :---: | :---: |
| 1 | and/or Untaxed Income) <br> $\$ 16,335$ or less |
| 2 | $\$ 22,065$ or less |
| 3 | $\$ 27,795$ or less |
| 4 | $\$ 33,525$ or less |
| + | Add $\$ 5,730$ for each additional <br> family member |

2. If you or your family receives any ONE of the following types of untaxable income:
a. Aid to Families with Dependent Children (TANF/CALWORKS); or
b. Supplemental Security Income (SSI/SSP); or
c. General Assistance/General Relief
3. Special Classification:
a. Deceased/Disabled Veterans Dependent's Fee Waiver certification provided by the California Department of Veterans Affairs or your county Veterans Services Office or the National Guard Adjutant General.
b. A recipient of the Congressional Medal of Honor or a child of a recipient, or a dependent of a victim of the September 11, 2001 terrorist attack.
c. A dependent of deceased law enforcement/fire suppression personnel killed in the line of duty.

You may also qualify for the BOGFW fee waiver by filing the Free Application for Federal Student Aid (FAFSA). In addition to enrollment fee assistance, you may qualify for funds to pay for books, supplies, transportation, child care, and more.

Students may apply for the BOGFW online at shastacollege.edu/fa/bogfw/. You may complete an online application or download a printable PDF application. Only complete one. Applications for 2012-13 are good for Summer 2012, Fall 2012, and Spring 2013.

DEADLINES: To file for a BOGFW fee waiver with the FAFSA, apply NOW. Applications take a minimum of eight (8) weeks to process. For enrollment fee assistance only, apply one (1) week prior to registration.

Students who are awarded a Board of Governors fee waiver (BOGFW) after they have paid their enrollment fees will be reimbursed only for the semester in which they are granted a BOGFW fee waiver. The fee waivers will not be applied retroactively to prior semesters.

For further information contact: SHASTA COLLEGE FINANCIAL AID OFFICE, Room 108, or phone (530) 242-7700.

## Registration and Related Fees

Refer to Chapter 2 - Admission and Enrollment Information.

## Financial Aid/Scholarships

## (530) 242-7700 Room 108

## FINANCIAL AID

The Financial Aid Office assists students in funding their educational objective through federal and state financial aid programs. We seek to package and award as many eligible students within an adequate time frame to enable students to financially prepare for school. It is our belief that a well-prepared student is a successful student. Awarding financial aid equips our students with the resources needed to successfully accomplish their declared educational goals.

Basic to the philosophy of financial aid that first and foremost the family has the responsibility for assisting the student in meeting their educational expenses, and when the family is unable to meet this gap, as defined by the expected family contribution (EFC), financial assistance is available. The fundamental principles of administering financial aid is that the primary responsibility for the cost of a college education belongs to the student and their family. Financial aid is intended to supplement the family's own resources and contributions. Financial aid is not to be considered a means of support.

## ABILITY TO BENEFIT STUDENT

Effective with the 2012-2013 award year, new students who do not have a high school diploma, or an equivalent such as a GED, and who did not complete secondary school in a home school setting are not eligible for Title IV funds. Such students can no longer become eligible by passing an approved "ability-to-benefit" test or by satisfactorily completing at least six credit hours or 225 clock hours of college work that is applicable to a degree or certificate offered by the student's postsecondary institution.

However, students who were enrolled in an eligible educational program of study before July 1, 2012, may continue to be considered Title IV eligible under either the ATB test or credit hour standards.

## SCHOLARSHIPS

The Financial Aid Office administers a scholarship program that awards more than $\$ 160,000$ to students each year. Not all scholarships are based on academic achievement; some consider financial need, ethnicity, field of study, and other criteria. Shasta College scholarship offerings are exclusively available to Shasta College students.

## IMPORTANT DATES TO REMEMBER

March 2 Priority filing date for financial aid. After this date funds are
August Fall scholarship applications available.
October Deadline for Fall scholarship applications.
December
Spring scholarship applications available
February Deadline for Spring scholarship applications.
PLEASE NOTE: EMERGENCY REGISTRATION/BOOKS LOANS ARE AVAILABLE FOR STUDENTS WHO QUALIFY.

My Documents for Communication: Current students can use the Financial Aid menu through My Shasta to track his/her financial aid status.

Financial Aid webpage: The Financial Aid webpage at www.shastacollege.edu/fa/ provides up-to-date information covering all aspects of financial aid for current and prospective students.

## Chapter 4 - Grading and Academic Standards

## Audit

Please see Chapter 2 - Admission and Enrollment Information for details.

## Grading

It is the responsibility of the instructor for the assignment of grades in any Shasta College course. To insure that grading is done consistently and fairly, the instructor shall:

1. Develop a grading procedure prior to the beginning of the course and have this procedure clearly communicated to each student on the first day handout (syllabus) of each course.
2. Establish a grading procedure that shall guarantee the academic integrity of the course at the appropriate level.
3. Once established, adhere to the course grading procedure throughout the semester.
4. Give sufficient evaluations throughout the course to insure that students are aware of progress and to inform the students of standing in the course.
5. Abide by established examination schedules of the college.
6. Adhere to established deadlines and use appropriate forms for submitting grades to the Records Office.
7. File all grade changes within two (2) years of the original grade being issued.

## GRADE CHANGE PROCEDURE

Under no circumstances except for completion of work for removal of an incomplete, may a grade change be made as the result of work completed or presented following the close of a grading period (Administrative Procedure 4230). The Incomplete (I) may be made up no later than one year following the end of the term in which it was assigned. (Note: Fall 79 to Fall 81 students had one semester in which to make up incompletes. Beginning with Fall 81 a written record must be filed by the instructor stipulating the condition to be made for an evaluative grade.) ALL GRADE CHANGES MUST BE SUBMITTED DIRECTLY BY THE INSTRUCTOR TO THE ADMISSIONS AND RECORDS OFFICE.

## GRADE CHANGE APPEAL PROCEDURE - BOARD POLICY 4230

The instructor of the course shall determine the grade to be awarded to each student. The determination of the student's grade by the instructor is final in the absence of mistake, fraud, bad faith, or incompetence. The removal or change of an incorrect grade from a student's record shall only be done upon authorization by the instructor of the course. In the case of mistake, fraud, bad faith, or incompetence, the final determination concerning removal or change of grade will be made by the Vice President of Academic Affairs or his/her designee.

The procedure for appealing a grade is available at the Admissions and Records Office.

## Grading Definitions

The course grading procedure is based on the established course objectives according to the following grade definitions:
A-Excellent - Outstanding achievement of the course objectives. (4 grade points)
B-Good - Above average achievement of the course objectives. The quality of work demonstrates a comprehensive knowledge of the subject matter and a marked ability to interpret it. (3 grade points)

C - Fair to Average - Satisfactory or average achievement of the course objectives. The performance fulfills the course requirements in both quality and quantity and meets acceptable standards for graduation. (2 grade points)

D - Passing - Less than satisfactory achievement below the course objectives but such that it is not necessary to repeat the course. The level of achievement is not generally satisfactory for advancement in studies in the same or related areas. (1 grade point)

F - Failing - Failure to achieve objectives of the course. The performance is undeserving of course credit. (0 grade points)
P-Pass - Satisfactory achievement of course objectives. Student is passing the course with a "C" or better. (Not used in grade point calculations.) See Board Policy 4230 and 4232 for more information.

FW - Failing-Withdrawal - A student who has both ceased participating in a course sometime after the last day to withdraw from the course without having achieved a final passing grade, and who has not received district authorization to withdraw from the course due to extenuating circumstances may be assigned an "FW".

NP - No Pass - Student is doing "D" or "F" work in the course. (Not used in grade point calculations.)

## Non-Evaluative Symbols Definitions

AU - Audit - Auditing is to allow students to participate in class activities beyond the course repetition limit; and to allow students to repeat a course with the intent of upgrading needed skills or reviewing course content. Priority will be given to credit-seeking students.

I - Incomplete - Incomplete academic work for unforeseeable emergencies and justifiable reasons at the end of the term may result in an "I" symbol being entered in the student's record. The condition for removal of the "I" shall be stated by the instructor in a written record (form available from the registrar). This record shal contain the conditions for removal of the "I" and the grade assigned in lieu of its removal. This record must be given to the student with a copy on file with the registrar until the "I" is made up or the time limit has passed. A final grade shall be assigned when the work stipulated has been completed and evaluated, or when the time limit for completing the work has passed. The "I" may be made up no later than one year following the end of the term in which it was assigned; however, the student may petition the Scholastic Standards Committee for a time extension due to unusual circumstances.

IP - In progress - The "IP" symbol shall be used to denote that the class extends beyond the normal end of an academic term. It indicates that work is "in progress", but that the assignment of a substantive grade must await its completion. The "IP" symbol shall remain on the student's permanent record in order to satisfy enrollment documentation. The appropriate evaluative grade and unit credit shall be assigned and appear on the student's record for the term in which the course is completed. The "IP" shall not be used in calculating grade point averages.

RD - Report Delayed - The "RD" symbol shall be assigned by the registrar only. It is to be used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible. "RD" shall not be used in calculating grade point averages.

MW - Military Withdrawal - Military withdrawal occurs when a student who is a member of an active or reserve United States military service receives orders (other than TDY) compelling a withdrawal from courses. A student must file a petition requesting this option and attach a copy of military orders at the Admissions and Records Office. Military withdrawals will not be counted in progress probation and dismissal calculations. See the Dean of Enrollment Services for specific details.

W - Withdrawal - Students may withdraw from a class after the official "drop" date and up through the last day of the fourteenth week or $75 \%$ of the term, whichever is less. The notation " $W$ " will appear on the student's transcript and will not be used in calculation of grade point average. Excessive "W"s shall, however, be used as factors in probation and dismissal procedures. IT IS THE STUDENT'S RESPONSIBILITY TO OBTAIN FORMS AND SUBMIT THE NECESSARY PAPERWORK TO WITHDRAW FROM A CLASS(ES). An instructor may also drop a student during the first 75\% of the class for non-participation. Forms are available from Admissions and Records, Extended Education sites, or by mail. Students who have not dropped or withdrawn from a class before the end of the fourteenth week or $75 \%$ of the term will be assigned a course grade.

## Non-Traditional Ways to Earn Credit

## ADVANCED PLACEMENT EXAMINATION CREDIT

Shasta College will award credit to students scoring a 3, 4, or 5 on Advanced Placement examinations as indicated below. Students should have test scores sent to the Shasta College Admissions and Records Office and then contact the office during their first semester to have credit posted to their transcripts. Each transfer institution will determine the number of units awarded and the courses satisfied according to individual campus policies. For specific course information, students are encouraged to meet with a counselor.

All CSU campuses will accept the exams shown below toward fulfillment of the designated General Education-Breadth area if the examination is included in a full or subject-area certification. The CSU campus to which the student is transferring determines the total number of units awarded for successful completion of an Advanced Placement examination and the applicability of the examination to other graduation requirements.
The University of California grants credit for all Advanced Placement examinations on which a student scores 3 or higher. The credit may be subject credit, graduation credit, or credit toward General Education or breadth requirements, as determined by evaluators at each campus. Shasta College will certify the units for the IGETC General Education area indicated below.

Continued on next page..

| AP Subject Exam | CSU GE AREA | IGETC AREA |
| :---: | :---: | :---: |
| Art History | C1 or C2 | 3 A or 3B |
| Biology | B2 and B3 | 5 B with lab |
| Calculus AB | B4 | 2A |
| Calculus BC | B4 | 2A |
| Chemistry | B1 and B3* | 5A with lab |
| Chinese Language and Culture | C2 | 3B |
| English Language | A2 | 1A |
| English Literature | A2 + C2 | 1 A or 3 B |
| Environmental Science (pre-Fall 2009) | $B 2+B 3$ | 5A with lab |
| Environmental Science (post-Fall 2009) | $\mathrm{B} 1+\mathrm{B} 3$ | 5A with lab |
| European History | C2 or D6 | 3 B or 4F |
| French Language | C2* | 3 B and 6A |
| French Literature | C2 | 3 B and 6A |
| German Language | C2* | 3 B and 6A |
| Government \& Politics: Comparative | D8 | 4 H |
| Government and Politics: U.S. | D8 + US-2 | 4H |
| Human Geography | D5 | 4E |
| Italian Language and Culture | C2* | 3B and 6A |
| Japanese Language and Culture | C2 | 3 B and 6A |
| Latin Literature | C2* | 3 B and 6A |
| Latin: Virgil | C2 | 3 B and 6A |
| Macroeconomics | D2 | 4B |
| Microeconomics | D2 | 4B |
| Music Theory | C1* | NA |
| Physics B | B1 + B3* | 5A with lab |
| Physics C (Electricity/Magnetism) | $B 1+B 3$ | 5A with lab |
| Physics C (Mechanics) | $B 1+\mathrm{B} 3$ | 5A with lab |
| Psychology | D9 | 41 |
| Spanish Language | C2* | 3B and 6A |
| Spanish Literature | C2* | 3 B and 6A |
| Statistics | B4 | 2A |
| United States History | (C2 or D6) + US-1 | 3 B or 4F |
| World History | C2 or D6 | 3 B or 4F |

## *heck with a counselor for restrictions

## CHALLENGE (CREDIT BY EXAMINATION) - BOARD POLICY 4235

A student may challenge a class by taking an examination. Examinations may be taken only once and, if passed, the credit will be posted on the student's permanent academic record. No more than 15 units may be earned through this procedure and only courses determined by each Division of the college are open for the option.

This option is restricted to students registered for credit during the fall or spring semester. Credit by examination is not possible during the summer session. Petition (challenge) forms are available from each Division office. A listing of approved courses can be obtained from the Division office.

## CREDIT THROUGH THE COLLEGE LEVEL EXAMINATION PROGRAM

## CLEP) - BOARD POLICY 4235

Upon completion of six semester units at Shasta College, a student may submit official College Level Examination Program (CLEP) test results to Shasta College from the College Entrance Examination Board (CEEB). Contact the CEEB for a testing center location (Shasta College is not a testing center). CEEB established the program to serve students who have a college-level education developed outside of the classroom (e.g. military experience/training). The following restrictions apply:

- Up to 30 semester units may be applied toward an Associate degree.
- A scaled score of 50 or higher on a CLEP examination will earn credit (For the older General Exams, a score of 500 or better will earn credit.)
- Units awarded for satisfactory completion of CLEP examinations will post as electives, except as noted by departmental policy referenced below.
- Grades and grade points will not be assigned to CLEP units.
- Units awarded through CLEP will not apply toward the 12-unit residency requirement for Shasta College.
- The Univ. of California (UC) does not accept credit awarded through CLEP.
- Where considered by the appropriate department and division, CLEP Examinations may satisfy specific courses or a specific course prerequisite. Contact the appropriate department or Division to determine which, if any, of the examinations may satisfy specific courses or course prerequisites. Minimum scores for Shasta College course equivalencies, where established, may be obtained from Admissions and Records.
- Contact the Admissions and Records Office or Counseling for more information.
- Shasta College will grant credit for the following CLEP Subject Exams in accordance with the CSU system-wide policy:

College Algebra \& Trigonometry/Passing Score: 50/3 semester units Calculus \& Elementary Functions/Passing Score: 50/3 semester units General Chemistry/Passing Score: 50/3 semester units

| CLEP EXAM | CSU GE AREA |
| :--- | :--- |
| American Government | D8 |
| American Literature | C2 |
| Analyzing and Interpreting Literature | C2 |
| Biology | B2 |
| Calculus | B4 |
| Chemistry | B1 |
| College Algebra | B4 |
| College Algebra - Trigonometry | B4 |
| English Literature | C2 |
| French Level II | C2 |
| German Level II | C2 |
| History, United States I | D6 + US-1 |
| History, United States II | D6 + US-1 |
| Human Growth and Development | E |
| Humanities | C2 |
| Introductory Psychology | D9 |
| Introductory Sociology | D0 |
| Natural Sciences | B1 or B2 |
| Pre-Calculus | B4 |
| Principles of Macroeconomics | D2 |
| Principles of Microeconomics | D2 |
| Spanish Level II | C2 |
| Trigonometry | B4 |
| Western Civilization I | C2 or D6 |
| Western Civilization II | D6 |

## DISTANCE EDUCATION (DE)

Distance education means providing access to education beyond the traditional patterns of campus-based education and programs. It does so by offering a variety of programs and courses held at each of the three Extended Education campuses in Red Bluff, Weaverville, and Burney as well as other sites throughout the District. It also means offering classes in a variety of formats including live, internet-based (online/hybrid/web enhanced), and 2-way interactive television (ITV) instruction. Students may register online, on campus and at Extended Education campuses for all Distance Education courses.

All courses offered in these formats offer the same rigorous learning experience found in traditional face-to-face courses. These courses are designed for individuals who are unable to attend campus classes on a regular basis, prefer independent learning, or would like to take courses at their convenience.

Interactive Television (ITV): A variety of courses are available at selected sites using two-way interactive video technology. These courses originate on the Redding campus or one of the Extended Education campuses with real time delivery of the classroom activities to the other sites. Students are able to fully interact with the faculty member and other students at each of the sites. Procedures for examinations, assignments, and other class requirements are explained at the first class meeting.

Internet-based Courses: Courses are available in a variety of Internet-based formats (online, hybrid, or web enhanced) and typically offer greater flexibility for students' schedules. Contrary to some beliefs, however, Internet-based courses are not easy. They require a well disciplined, motivated student with computer skills, familiarization with the Internet, a reliable computer, and a high-speed Internet connection. State regulations regarding enrollment in online classes may change and online classes may not be available to students residing outside California. Three types of Internet-based courses are offered at Shasta College:

1. Web Enhanced: Any class which meets face to face for the full number of instructional hours AND utilizes the Internet to augment course materials is a web enhanced course. No class hours are scheduled to be replaced by online time. Web enhanced courses are listed in the front part of the schedule with other face to face course offerings, but may require login to SC Online. Consult the My Shasta online schedule for specific information.
2. Hybrid: A hybrid class meets face to face for some number of instructional hours AND a portion of the required instructional hours is conducted online (normally requiring login to SC Online). Students MUST access online materials to successfully complete course requirements. Hybrid courses are listed with the days and times of actual face to face meetings followed by "+ INTERNET."
3. Online: A fully online class is one which requires that all class content, activities, and interaction be done online (normally requiring login to SC Online). Some instructors may include on-campus orientation, student conferences, or other on-campus events (consult the My Shasta online schedule for specific information). Students MUST access online materials to successfully complete course requirements. Fully online courses are listed as "INTERNET." State regulations regarding enrollment in online classes may change and online classes may not be available to students residing outside California.

## Non-Traditional Ways to Earn Credit (continued):

## INDEPENDENT STUDY

Independent study provides a forum for advanced work in a given field of study. A student may contract with a full-time instructor to do independent study in a specific subject area in which he/she has exhausted the regular curricular offerings provided that:

99 - Transfer Level Courses* -- The student has a declared major or already possesses a degree and has completed a minimum of 12 transfer units at Shasta College.

199 - Non-Transfer Level Courses* -- The student has completed a minimum of 12 units at Shasta College

Independent study can be taken for .5-3 units. The total hours required are as follows:

$$
\begin{aligned}
& .5 \text { unit = } 27 \text { hours; } 1.0 \text { unit = } 54 \text { hours; } 1.5 \text { units = } 81 \text { hours; } \\
& 2.0 \text { units = } 108 \text { hours; } 2.5 \text { units = } 135 \text { hours; and } 3.0 \text { units = } 162 \text { hours. }
\end{aligned}
$$

*Note: Any combination of these courses may be repeated three times (total of four enrollments) or a maximum of six independent study units.

Forms and additional information are available from your instructor or the Division Office.

INTERNATIONAL BACCALAUREATE (IB) EXAMINATIONS

| IB Exam | CSU GE AREA | IGETC AREA |
| :---: | :---: | :---: |
| Biology HL | B2 | 5B (without lab) |
| Chemistry HL | B1 | 5A (without lab) |
| Economics HL | D2 | 4B |
| Geography HL | D5 | 4 E |
| History (any region) HL | C2 or D6 | 3 B or 4F |
| Language A1 (any language except English) HL | C2 | 3B and 6A |
| Language A2 (any language except English) HL | C2 | 3B and 6A |
| Language A1 (any language) HL | C2 | 3B |
| Language A2 (any language) HL | C2 | 3B |
| Language B (any language) HL | N/A | 6A |
| Mathematics HL | B4 | 2A |
| Physics HL | B1 | 5A |
| Psychology HL | D9 | 41 |
| Theatre HL | C1 | 3A |

## MILITARY EXPERIENCE

In general, Shasta College will follow the recommendations of the State Board of Educ., the Univ. of Calif., and the American Council of Education in granting credit for military experience. Total credit for military experience is limited to 15 units.
Correspondence courses given by the United States Armed Forces Institute or by an accredited college or university are accepted for credit value as recommended by the American Council on Education. College credit will not be allowed for duplicated training. The total number of units granted for USAFI courses shall not exceed 24 units. No credit will be given at Shasta College for General Education Development tests.

Credits will be granted to those students who present a DD214. The student will be required to provide the Registrar with a copy of his/her DD214 for verification. Application for such credit must be made on a form obtained from the Registrar's Office at Admissions and Records. This credit must be verified. All new Veterans to Shasta College should call for information and an appointment at (530) 2427662 or visit the Admissions and Records Office, Bldg. 100.

## PRIOR WORK EXPERIENCE

A student having experience related to the program in which he/she is enrolled may be granted credit for such experience. The credit is applicable only for an Associate degree at Shasta College. Students applying for credit should obtain an application from the Admissions and Records Office.

## WORKSITE LEARNING

Students who are interested in combining practical work experience with classroom instruction may enroll in a Worksite Learning class. Worksite Learning classes (the complete list of courses provided below) are open entry. This means that the student may enroll throughout the semester, but must complete all work by the end of the semester (per agreement with the instructor). One unit of Worksite Learning credit is granted for each 75 hours of actual on-the-job activity for a paid work position or 60 hours for a non-paid work position of on-the-job activity. It is imperative for the student to determine how many units he/she should sign up for. This should be worked out with the instructor in the initial orientation meeting. If the student is unable to verify enough work hours to meet the units for which he/she enrolls, the student will receive an " $F$ " in the course. For example, if a student enrolls in a three (3)-unit worksite learning class and fails to verify 225 paid hours of on-the-job activity by the deadline established by
the instructor, the student will receive an " $F$ " in the class. The student has the same withdrawal and add/drop options as for any other course.

The following courses are listed in the catalog under the appropriate disciplines as worksite learning classes. For details look under the specific prefixes. The classes, units, instructors, and times of the initial orientation meetings for each semester are listed in the current schedule of classes. Not all worksite learning classes are offered every semester.
Worksite Learning Classes: ADJU 94, AG 94, AGEH 94, AGNR 94, AUTO 94, BUAD 94, CIS 94 , CONS 94, CULA 94 , DIES 94, DSS 94, ECE 94, EDUC 94, ENGR 94, FIRS 94, FSS 94, GIS 94, HEOC 94, HOSP 94, MKTG 94, OAS 84, PEAT 94, WELD 94, WSL 94*
Please note that it is up to the instructor in the specific discipline to determine if the student's proposed work assignments are related to the student's major. If a proposed work assignment is not discipline/major related, credit will not be granted.
Each worksite learning course has a prerequisite or co-requisite. Check the course description for specific information.
*WSL 94 is considered a General Work Experience course for supervised employment that is intended to assist students in acquiring desirable work habits, attitudes and career awareness. The work experience need not be related to the students' educational goals.

FINANCIAL AID STUDENTS: Students must maintain concurrent enrollment in seven (7) units which include worksite learning units.
VETERAN STUDENTS: Worksite learning will NOT be paid unless it is required for the student's major. In addition, veterans receiving veteran's educational benefits for WSL units MUST register for the appropriate co-requisite in the same semester.

## Pass/No Pass Policy

Shasta College offers two categories of "Pass/No Pass" courses. "Pass/No Pass" classes must be so designated in the college catalog. The catalog must specify into which "Pass/No Pass" category each course falls. (Title 5, Section 55022)

The two categories are:

1) Courses which are designated as only Pass/No Pass, and
2) Courses in which a student has the option of receiving a grade or taking the course for credit through Pass/No Pass. A student who exercises that option and applies to take a course for Pass/No Pass shall not receive a grade for that course and will receive a " P " for credit or a "NP" for no credit shall appear on his/her official transcript of record. Units attempted for which the symbol "NP" is recorded shall be considered in probation and dismissal procedures.

Students may use the Pass/No Pass grade option in no more than one course per semester, and may apply no more than ten semester credit ( $P$ ) units toward the A.A. Degree.

Students who are awarded credit $(P)$ in a course shall receive both course credit and the full unit credit for the course. In computing a student's grade-point average, grades of "Pass/No Pass" are omitted.

It is the responsibility of the student to be familiar with the "Pass/No Pass" policy in force at the college or university campus to which he/she hopes to transfer and to comply with that policy.

## Repetition of a Course: Board Policy 4225

Repetition of a college course is restricted and shall occur only under the following conditions:

For purposes of this policy, an evaluative grade is defined as a grade of $A, B, C$, D, F, W or FW.

Repetition of a college course is generally restricted to two repetitions for a total of three enrollments and shall occur under the following conditions:
(a) Students receiving a D, F, FW, W or NP grade in a course may repeat the course twice without petition. When a course is repeated under this condition, the last evaluative grade earned shall be the grade used in the computation of the student's grade point average.
(b) In order to repeat a course one time in which an A, B, C or P grade was earned, the student must petition the Scholastic Standards Committee for permission prior to enrolling in the course. When a course is repeated under this condition, the grade awarded shall not be calculated in the student's grade point average. However, the new grade may be considered by a specific program for admission to that program.
Continued on next page...

## Repetition of a Course (continued):

(c) In order to repeat a course a third time (for a total of four enrollments) in which a D, F, FW, W, or NP grade was earned, the student must petition the Scholastic Standards Committee for permission prior to enrolling in the course. When a course is repeated under this condition, the last evaluative grade earned shall be the grade used in the computation of the student's grade point average.

When course repetition occurs, the student's permanent academic record shall clearly indicate any courses repeated using an appropriate symbol and be annotated in such a manner that all work remains legible, insuring a true and complete academic history.

When there has been a significant lapse of time, defined as 5 years, since a student obtained a satisfactory grade in a course, the student may petition the Scholastic Standards Committee to repeat the course. When repetition due to significant lapse of time is granted, the grade received will not be calculated in the GPA.

## Scholastic Deficiency

For the purposes of Board Policy, the phrases "units attempted," "all units," or "all units attempted," mean all units of credit for which the student was enrolled at Shasta College regardless of whether the student completed the course or received any credit or grade. This specifically includes all "credit," "no credit," "I," and "W" grades. The word "semester" shall refer to the Fall and Spring terms. The condensed summer session is not considered a "semester."

## STANDARDS FOR PROBATION

a. Academic Probation - A student who has attempted at least 12 semester units as shown by the official academic record shall be placed on academic probation if the student has earned a cumulative grade point average below 2.0 in all units which were graded on the basis of the grading scale described in Board Policy, Section 4230.
b. Progress Probation - A student who has attempted at least 12 units as shown by the official academic record shall be placed on progress probation when the percentage of all units in which a student has enrolled and for which entries of "W", "I", and "NC" are recorded reaches or exceeds fifty percent (50\%).

## REMOVAL FROM PROBATION

a. A student on academic probation for a grade point deficiency shall be removed from probation when the student's accumulated grade point average is 2.0 or higher.
b. A student on progress probation because of an excess of units for which entries of "W", "I", and "NC" are recorded shall be removed from probation when the percentage of units in this category drops below fifty percent (50\%).

## EXTENSION OF PROBATION

a. A student on academic probation who earns a grade point average of 2.0 or better for the semester, but whose cumulative grade point average still results in academic probation, shall have his/her probation extended an additional semester prior to dismissal.
b. A student on progress probation who completes more than $50 \%$ of all units attempted for the semester, but whose cumulative records still results in progress probation, shall have his/her probation extended an additional semester prior to dismissal.

## Standards for Academic Dismissal

For purposes of this section, semesters shall be considered consecutive on the basis of the student's enrollment (for example, a fall semester followed by a fall semester shall be considered consecutive if the student was not enrolled in the spring semester of that academic year).

A student who is on academic probation shall be dismissed if the student earned a cumulative grade point average of less than 2.0 in all units attempted and graded in each of three consecutive semesters, including the semester that placed the student on probation (which were graded on the basis of the grading scale described in Board Policy, Section 4230).

A student who has been placed on progress probation shall be dismissed if the percentage of units in which the student has been enrolled for which entries of "W", "I", and "NC" (as defined in Board Policy, Section 4230) are recorded in at least three consecutive semesters reaches or exceeds fifty percent (50\%) in accordance with Board Policy, Section 4230.

## NOTIFICATION OF DISMISSAL

The Admissions and Records Office shall make every reasonable effort to notify a student of dismissal from Shasta College due to academic disqualification as soon as that information is available following the completion of the semester. If a dismissed student has already enrolled in classes for a fall or spring semester, the Admissions and Records Office will dis-enroll the student retroactively as of the first day of the new term. The Admissions and Records Office will notify the student in writing of this action. Dismissal does not apply to summer school.

## REINSTATEMENT

A student who has been dismissed from Shasta College because of academic or progress disqualification must meet with a counselor and then file a request for reinstatement with the Admissions and Records Office. A dismissed student may be reinstated after an absence of one or more fall or spring semesters. This will not preclude the student from being eligible for priority registration.
(a) Academic Dismissal. A student who was dismissed because of academic probation must earn satisfactory grades (a grade point average of 2.0 or better) during the semester of reinstatement. A student who does not earn the required grade point average will be dismissed.
(b) Progress Dismissal. A student who was dismissed because of progress probation must satisfactorily complete more than $50 \%$ of all units attempted during the semester of reinstatement. A student who does not complete the required percentage of units will be dismissed.

## APPEAL

Any student may appeal probation or dismissal procedures and regulations if that student feels there are special mitigating circumstances. All appeals shall be sent to the Scholastic Standards Committee, accompanied by a report from the student's counselor.

## Withdrawing From a Class with a "W" Grade

THE CONSEQUENCES OF WITHDRAWING FROM A CLASS ARE CHANGED EFFECTIVE SUMMER 2012. Refer to "Repetition of a Course" earlier in this chapter for limitations and other information.

Students may withdraw from a class after the official "drop" date and up through the last day of the fourteenth week or $75 \%$ of the term, whichever is less. A student may drop a class and have no notation appear on their transcripts through the census date of each class. After the census date of each class and up to $75 \%$ a student may withdraw from a class. The notation "W" will appear on the student's transcript and will not be used in calculation of grade point average. Excessive "W"s shall, however, be used as factors in probation and dismissal procedures. An instructor may also drop a student during the first $75 \%$ of the class for non-participation.

IT IS THE STUDENT'S RESPONSIBILITY TO OBTAIN FORMS AND SUBMIT THE NECESSARY PAPERWORK TO WITHDRAW FROM CLASS(ES). Forms are available from Admissions and Records, Extended Education sites, or by mail. Students can drop a class in person at Admissions and Records or Extended Education sites, or online through MyShasta. Students who have not dropped or withdrawn from a class before the end of the fourteenth week or $75 \%$ of the term will be assigned a course grade.

# Shasta College 2012-13 Associate Degree Requirements 

The information provided below gives a brief description of the degrees offered at Shasta College. It does not outline all of the requirements to obtain an associate degree from Shasta College or all of the requirements to transfer to a four-year college or university. All students should schedule an appointment to speak with a counselor to ensure that they meet all of the degree and/or transfer requirements. Meeting with a counselor also helps ensure that the student is pursuing a degree that meets his or her educational and career goals.

## TRANSFER DEGREES

The following associate degrees for transfer are designed for the student who wishes to complete lower-division requirements in preparation for transfer to a fouryear college or university.

## AA-T and AS-T (Transfer Degree):

Designed for the student planning on transferring to the California State University (CSU) system. Students complete the CSU or IGETC general education pattern and specific courses related to their major. Students who are awarded these degrees are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses. This degree requires a minimum of 60 transferrable units. The student completing this degree is not subject to specific community college graduation requirements.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirement for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.
Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs. Shasta College offers the following AA-T/AS-T degrees:

Business Administration Communication Studies Early Childhood Education Sociology

## REQUIREMENTS:

1. Unit Requirement: Minimum of 60 California State University (CSU) transferrable semester units, courses numbered 1-99 at Shasta College.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 in all transferrable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer universities may require a higher GPA. Please consult with a counselor for more information.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. Course Requirements:
a. Major Field of Study: Select an "AA-T" or "AS-T" major. All courses in the major must be completed with a grade of "C" or higher.
b. General Education: Certified completion of the California State University General Education (CSU GE); OR the Intersegmental General Education Transfer Curriculum (IGETC). Note: If completing IGETC all courses must be completed with a grade of "C" or higher.
i. Advanced Placement (AP) examination credit can be used to satisfy both CSU GE and IGETC.
ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy CSU GE. Note: The University of California does not accept credit awarded through CLEP.
5. Competency Requirements:

Oral Communication, English Composition, Critical Thinking, and Quantitative Reasoning courses must be completed with a grade of " $C$ " or higher.
6. These degrees do not require completion of a multicultural course or demonstration of computer literacy for Shasta College graduation purposes.

## AA - University Studies Degree:

Designed for students who plan on transferring to a four-year college or university. Students complete a General Education pattern, one emphasis area, and electives to total a minimum of 60 transferrable units for the AA degree.

Agriculture Sciences
Allied Health
Behavioral Science
Biological Sciences
Business Administration
Child Development
Criminal Justice
Earth System Science

Engineering
Geology
Humanities
Language Arts
Liberal Studies-Teaching Prep
Mathematics
Meteorology/Climatology
Multicultural Studies

Natural Sciences
Oceanography
Physical Education
Physical Sciences
Quantitative Reasoning
Science Teacher - Earth
Social Sciences
World Languages

## REQUIREMENTS:

1. Unit Requirement: Minimum of 60 transferrable semester units, courses numbered 1-99 at Shasta College. Note: Please see a counselor to ensure that all of your units are transferrable since there are some exceptions to this rule.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 in all transferrable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer institutions may require a higher GPA. Please consult with a counselor for more information.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. Course Requirements:
a. Major Field of Study: Select a University Studies emphasis area. All courses in the emphasis area must be completed with a grade of "C" or higher.
b. General Education: Completion of one of three general education options. Note: If completing Intersegmental General Education Transfer Curriculum (IGETC) all courses must be completed with a grade of "C" or higher.
i. Advanced Placement (AP) examination credit can be used to satisfy both California State University General Education (CSU GE) and IGETC.
ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy CSU GE. Note: The University of California does not accept credit awarded through CLEP.
[^1]AA - University Studies requirements continued:
5. Competency Requirements:
a. English Composition, Critical Thinking, and Quantitative Reasoning courses must be completed with a grade of " C " or higher. Note: If you are completing General Education options 2 or 3, an Oral Communication course is also required to be completed with a grade of " C " or higher.
b. Multicultural Requirement: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.

| ADJU 24 | CHIN 1 | FREN 1, 2, 3, 4 | JAPN 1, 2, 3, 4 | RUSS 1, 2, 3, 4 |
| :--- | :--- | :--- | :--- | :--- |
| ANTH 2, 14, 25 | CMST 20 | GEOG 1B, 7, 8 | MUS 14 | SOC 25, 30 |
| ART 4 | ECE 28 | GERM 1, 2, 3, 4 | POLS 20 | SPAN 1, 2, 3, 4 |
| ASL 1, 2, 3, | ENGL 10A, 10B, 18, 20, 24 | HIST 2, 3, 25, 35, 36, 38 | PSYC 20, 41 |  |

c. Computer Literacy Competency Requirement: To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:

- CIS 1 Computer Literacy with a grade of C or better.
- AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better.
- Three units to include the coursework options listed below with a grade of $C$ or better:
$\checkmark$ CIS 70 (Windows); and
$\checkmark$ OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and
$\checkmark$ One additional class from: CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (Powerpoint). Note: MOS or MCAS certification will substitute for the equivalent software class.
- Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
- Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
- Possess IC $^{3}$ certification.
- Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
- Document completion of a computer literacy requirement at another college.


## AA Degree - Art* and Music:

Designed for the student planning on transferring to a four-year college or university. Students complete the CSU or IGETC general education pattern and the "Core Courses" electives to total a minimum of 60 transferrable units.
*The Art degree currently in the catalog is proposed to be replaced by an Associate of Arts Degree for Transfer in 2013-14. Students are advised to consult with a counselor before choosing the existing Art degree.

## REQUIREMENTS:

1. Unit Requirement: Minimum of 60 transferrable semester units, courses numbered 1-99 at Shasta College. Note: Please see a counselor to ensure that all of your units are transferrable since there are some exceptions to this rule.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 in all transferrable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer institutions may require a higher GPA. Please consult with a counselor for more information.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. Course Requirements:
a. Major Field of Study: All courses in the major must be completed with a grade of "C" or higher.
b. General Education: Certified completion of the California State University General Education (CSU GE ); OR the Intersegmental General Education Transfer Curriculum (IGETC). Note: If completing IGETC all courses must be completed with a grade of "C" or higher.
i. Advanced Placement (AP) examination credit can be used to satisfy both CSU GE and IGETC.
ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy CSU GE. Note: The University of California does not accept credit awarded through CLEP.
5. Competency Requirements:
a. English Composition, Critical Thinking, and Quantitative Reasoning courses must be completed with a grade of " C " or higher. Note: If completing the CSU GE pattern you must also complete an Oral Communication course with a grade of "C" or higher
b. Multicultural Requirement: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.

| ADJU 24 | CHIN 1 | FREN 1, 2, 3, 4 | JAPN 1, 2, 3, 4 | RUSS 1, 2, 3, 4 |
| :--- | :--- | :--- | :--- | :--- |
| ANTH 2, 14, 25 | CMST 20 | GEOG 1B, 7, 8 | MUS 14 | SOC 25, 30 |
| ART 4 | ECE 28 | GERM 1, 2, 3, 4 | POLS 20 | SPAN 1, 2, 3, 4 |
| ASL 1, 2, 3, 4 | ENGL 10A, 10B, 18, 20, 24 | HIST 2, 3, 25, 35, 36, 38 | PSYC 20, 41 |  |

c. Computer Literacy Competency Requirement: To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:

- CIS 1 Computer Literacy with a grade of C or better
- AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better.
- Three units to include the coursework options listed below with a grade of $C$ or better:
$\checkmark$ CIS 70 (Windows); and
$\checkmark$ OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and
$\checkmark$ One additional class from: CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (Powerpoint). Note: MOS or MCAS certification will substitute for the equivalent software class.
- Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
- Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
- Possess IC ${ }^{3}$ certification.
- Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
- Document completion of a computer literacy requirement at another college.


## AS Degree:

Designed for the student planning on transferring to a four-year college or university. Students complete the CSU or IGETC general education pattern and the "Core Courses" electives to total a minimum of 60 transferrable units. Shasta College offers the following AS Transfer Degrees:

Agriculture - Agricultural Business
Agriculture - Environmental Horticulture
Agriculture - Sustainable Agriculture

## REQUIREMENTS:

1. Unit Requirement: Minimum of 60 transferrable semester units, courses numbered 1-99 at Shasta College.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 in all transferrable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer institutions may require a higher GPA. Please consult with a counselor for more information.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. Course Requirements:
a. Major Field of Study: All courses in the major must be completed with a grade of "C" or higher.
b. General Education: Certified completion of the California State University General Education (CSU GE).
i. Advanced Placement (AP) examination credit can be used to satisfy CSU GE.
ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy CSU GE. Note: The University of California does not accept credit awarded through CLEP.
5. Competency Requirements:
a. Oral Communication, English Composition, Critical Thinking, and Quantitative Reasoning courses must be completed with a grade of " $C$ " or higher.
b. Multicultural Requirement: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.

| ADJU 24 | CHIN 1 | FREN 1, 2, 3, 4 | JAPN 1, 2, 3, 4 | RUSS 1, 2, 3, 4 |
| :--- | :--- | :--- | :--- | :--- |
| ANTH 2, 14, 25 | CMST 20 | GEOG 1B, 7, 8 | MUS 14 | SOC 25, 30 |
| ART 4 | ECE 28 | GERM 1, 2, 3, 4 | POLS 20 | SPAN 1, 2, 3, 4 |
| ASL 1, 2, 3, 4 | ENGL 10A, 10B, 18, 20, 24 | HIST 2, 3, 25, 35, 36, 38 | PSYC 20, 41 |  |

c. Computer Literacy Competency Requirement: To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:

- CIS 1 Computer Literacy with a grade of C or better.
- AGNR 52 Computers in Agriculture and Natural Resources with a grade of $C$ or better.
- Three units to include the coursework options listed below with a grade of $C$ or better:
$\checkmark$ CIS 70 (Windows); and
$\checkmark$ OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and
$\checkmark$ One additional class from: CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (Powerpoint). Note: MOS or MCAS certification will substitute for the equivalent software class.
- Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
- Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
- Possess IC $^{3}$ certification.
- Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
- Document completion of a computer literacy requirement at another college.


## NON-TRANSFER DEGREES

The associate degrees for non-transfer are designed for the student whose immediate goal is to seek out employment after completion of the degree, not to transfer to a four-year college or university.

## AS General Studies Degree:

Designed for students desiring a two-year degree to prepare to enter the workforce or continue in their current career. The choice of emphasis allows the student to explore an area of interest while providing sufficient depth in a field of knowledge to contribute to lifelong interest. Students complete the Associate Degree-General Education, one emphasis area, and electives to total a minimum of 60 units of coursework at the associate and transfer level.

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Agricultural Trades
Business - Basic Business
Climatological and Meteorological Studies
Coastal Oceanographic Studies
EMS - Emergency Medical Response
Fire - Fire Investigation
Fire - Fire Service Command, Co.Officer
Fire - Fire Service Leadership
Agricultural Trades
Business - Basic Business
Climatological and Meteorological Studies
Coastal Oceanographic Studies
EMS - Emergency Medical Response
Fire - Fire Investigation
Fire - Fire Service Command, Co.Officer
Fire - Fire Service Leadership
```

Fire - Fire/Rescue Technologies

- Humanities

Fire - Wildland Fire Behavior Industrial Technologies
Fire - Wildland Fire Reconnaissance
Food and Beverage and Lodging
Management
Geologic Field Studies
Health
Human Development

Language Arts
Natural Sciences
Office and Computer Technologies
Public Safety and Services
Social Sciences

## REQUIREMENTS:

1. Unit Requirement: Minimum of 60 semester units, courses numbered 1-199 at Shasta College.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 based on all college work attempted.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
(Requirements continued on next page)

AS - General Studies requirements continued:
4. Course Requirements:
a. Major Field of Study: Select a General Studies emphasis area. All courses in the emphasis area must be completed with a grade of "C" or higher.
b. General Education: 21-39 units. Select Associate Degree General Education, California State University General Education (CSU GE), or Intersegmental General Education Transfer Curriculum (IGETC). Note: Any student completing the CSU GE or IGETC requirements will also have met the Associate Degree General Education requirements for this degree.
i. Advanced Placement (AP) examination credit can be used to satisfy Associate Degree General Education, CSU GE, or IGETC.
ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy Associate Degree General Education or CSU GE. Note: The University of California does not accept credit awarded through CLEP.
5. Competency Requirements:
a. Competence in reading and in written expression is demonstrated by a grade of "C" or higher in one of the following courses. Note: Some degrees require completion of a specific course.

ENGL 1A College Composition BUAD 66 Business Communications
b. Competence in mathematics is demonstrated by one of the following criteria:

1. A grade of " C " or higher in one of the following courses or a mathematics course numbered from 1-99. Note: Some degrees require completion of a specific course.

MATH 102 Intermediate Algebra MATH 110 Essential Math
2. Performance at or above the level specified below on the following examinations:

| Examination | Score |
| :--- | :---: |
| College Board Advanced Placement Math Test (CALC or STAT) | 3 |
| Scholastic Aptitude Test - Mathematics (SAT-M) | 520 (Beginning 4/95) |
| American College Testing (ACT) - Math | 23 |
| COMPASS Algebra Test | 54 |
| Accuplacer - College Level | 45 |

c. Multicultural Requirement: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.

| ADJU 24 | CHIN 1 | FREN 1, 2, 3, 4 | JAPN 1, 2, 3, 4 | RUSS 1, 2, 3, 4 |
| :--- | :--- | :--- | :--- | :--- |
| ANTH 2, 14, 25 | CMST 20 | GEOG 1B, 7, 8 | MUS 14 | SOC 25, 30 |
| ART 4 | ECE 28 | GERM 1, 2, 3, 4 | POLS 20 | SPAN 1, 2, 3, 4 |
| ASL 1, 2, 3, 4 | ENGL 10A, 10B, 18, 20, 24 | HIST 2, 3, 25, 35, 36, 38 | PSYC 20, 41 |  |

d. Computer Literacy Competency Requirement: To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:

- CIS 1 Computer Literacy with a grade of C or better.
- AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better
- Three units to include the coursework options listed below with a grade of $C$ or better:
$\checkmark$ CIS 70 (Windows); and
$\checkmark$ OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and
$\checkmark$ One additional class from: CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (Powerpoint). Note: MOS or MCAS certification will substitute for the equivalent software class.
- Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
- Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
- Possess IC ${ }^{3}$ certification.
- Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
- Document completion of a computer literacy requirement at another college.


## AS Degree:

The AS degree is primarily oriented to technical, science, and occupational programs. It is intended for the student who plans to enter the workforce after completion of the twoyear degree. Students complete the Associate Degree-General Education, the courses in their major, and electives totaling a minimum of 60 units of coursework at the associate and transfer level.

| Administration of Justice | Computer Aided Drafting (CAD) Tech | Fire Technology |
| :--- | :--- | :---: |
| Agriculture-Equine Science | Computer and Information Systems | General Studies |
| Agriculture-Forest Science and Technology | Business Information Systems Concentration | Hospitality Management |
| Agriculture-Horticulture | Computer Networking Concentration (CCNA) | Culinary Arts Concentration |
| Agriculture-Natural Resources | Construction Technology | Hotel/Restaurant Mgmnt Concentration |
| Automotive Technology | Dental Hygiene | Nursing - Associate Degree Nursing |
| Business Administration | Diesel Technology | Office Administration |
| Accounting Concentration | Early Childhood Education | Administrative Office Professional |
| General Business Concentration | Engineering Technology | Health Information Management |
| Management Concentration | Family Studies | Welding Technology |

## REQUIREMENTS:

1. Unit Requirement: The majority of degrees require a minimum of 60 semester units of coursework, numbered 1-199 at Shasta College. Refer to your degree for the required number of units.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 based on all college work attempted
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
(Requirements continued on next page)

## AS Degree requirements continued:

4. Course Requirements:
a. Major Field of Study: Select an Associate Degree major. All courses in the major must be completed with a grade of "C" or higher.
b. General Education: 21-39 units. Select Associate Degree General Education, California State University General Education (CSU GE), or Intersegmental General Education Transfer Curriculum (IGETC). Note: Any student completing the CSU GE or IGETC requirements will also have met the Associate Degree General Education requirements for this degree.
i. Advanced Placement (AP) examination credit can be used to satisfy Associate Degree General Education, CSU GE, or IGETC.
ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy Associate Degree General Education or CSU GE. Note: The University of California does not accept credit awarded through CLEP.
5. Competency Requirements:
a. Competence in reading and in written expression is demonstrated by a grade of "C" or higher in one of the following courses. Note: Some degrees require completion of a specific course.

ENGL 1A College Composition BUAD 66 Business Communications
b. Competence in mathematics is demonstrated by one of the following criteria:

1. A grade of " $C$ " or higher in one of the following courses or a mathematics course numbered from 1-99. Note: Some degrees require completion of a specific course.

MATH 102 Intermediate Algebra MATH 110 Essential Math
2. Performance at or above the level specified below on the following examinations:

Examination
College Board Advanced Placement Math Test (CALC or STAT)
Scholastic Aptitude Test - Mathematics (SAT-M)
Score

American College Testing (ACT) - Math 23
COMPASS Algebra Test
23
54
45
c. Multicultural Requirement: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.

| ADJU 24 | CHIN 1 | FREN 1, 2, 3, 4 | JAPN 1, 2, 3, 4 | RUSS 1, 2, 3, 4 |
| :--- | :--- | :--- | :--- | :--- |
| ANTH 2, 14, 25 | CMST 20 | GEOG 1B, 7, 8 | MUS 14 | SOC 25, 30 |
| ART 4 | ECE 28 | GERM 1, 2, 3, 4 | POLS 20 | SPAN 1, 2, 3,4 |
| ASL 1, 2, 3, 4 | ENGL 10A, 10B, 18, 20, 24 | HIST 2, 3, 25, 35, 36, 38 | PSYC 20, 41 |  |

d. Computer Literacy Competency Requirement: To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:

- CIS 1 Computer Literacy with a grade of C or better.
- AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better
- Three units to include the coursework options listed below with a grade of $C$ or better:
$\checkmark$ CIS 70 (Windows); and
$\checkmark$ OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and
$\checkmark$ One additional class from: CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (Powerpoint). Note: MOS or MCAS certification will substitute for the equivalent software class.
- Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
- Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
- Possess IC ${ }^{3}$ certification.
- Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
- Document completion of a computer literacy requirement at another college.


## AA Degree -Theatre Arts:

Designed for students desiring a two-year degree to prepare to enter the workforce or continue in their current career. Students complete the Associate Degree-General Education, the "Core" courses in their major, and 60 units of coursework at the associate and transfer level.

## REQUIREMENTS:

1. Unit Requirement: Minimum of 60 semester units of coursework, numbered 1-199 at Shasta College.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 based on all college work attempted.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.

## 4. Course Requirements:

a. Major Field of Study: All courses in the major must be completed with a grade of "C" or higher.
b. General Education: 21-39 units. Select Associate Degree General Education, California State University General Education (CSU GE), or Intersegmental General Education Transfer Curriculum (IGETC). Note: Any student completing the CSU GE or IGETC requirements will also have met the Associate Degree General Education requirements for this degree.
i. Advanced Placement (AP) examination credit can be used to satisfy Associate Degree General Education, CSU GE, or IGETC.
ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy Associate Degree General Education or CSU GE. Note: The University of California does not accept credit awarded through CLEP.
5. Competency Requirements:
a. Competence in reading and in written expression is demonstrated by a grade of " C " or higher in one of the following courses. Note: Some degrees require completion of a specific course.

ENGL 1A College Composition BUAD 66 Business Communications
b. Competence in mathematics is demonstrated by one of the following criteria:

1. A grade of "C" or higher in one of the following courses or a mathematics course numbered from 1-99. Note: Some degrees require completion of a specific course.

MATH 102 Intermediate Algebra MATH 110 Essential Math
(Requirements continued on next page)

AA Degree Theatre Arts requirements continued:
2. Performance at or above the level specified below on the following examinations:

Examination
College Board Advanced Placement Math Test (CALC or STAT)
Scholastic Aptitude Test - Mathematics (SAT-M)
American College Testing (ACT) - Math
COMPASS Algebra Test
Accuplacer - College Level

Score
3
520 (Beginning 4/95)
520
23
54
54
45
c. Multicultural Requirement: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.

| ADJU 24 | CHIN 1 | FREN 1, 2, 3, 4 | JAPN 1, 2, 3, 4 | RUSS 1, 2, 3, 4 |
| :--- | :--- | :--- | :--- | :--- |
| ANTH 2, 14, 25 | CMST 20 | GEOG 1B, 7, 8 | MUS 14 | SOC 25, 30 |
| ART 4 | ECE 28 | GERM 1, 2, 3, 4 | POLS 20 | SPAN 1, 2, 3, 4 |
| ASL 1, 2, 3, | ENGL 10A, 10B, 18, 20, 24 | HIST 2, 3, 25, 35, 36, 38 | PSYC 20, 41 |  |

d. Computer Literacy Competency Requirement: To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:

- CIS 1 Computer Literacy with a grade of C or better.
- AGNR 52 Computers in Agriculture and Natural Resources with a grade of $C$ or better
- Three units to include the coursework options listed below with a grade of $C$ or better:
$\checkmark$ CIS 70 (Windows); and
$\checkmark$ OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and
$\checkmark$ One additional class from: CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (Powerpoint). Note: MOS or MCAS certification will substitute for the equivalent software class.
- Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
- Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
- Possess IC ${ }^{3}$ certification.
- Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
- Document completion of a computer literacy requirement at another college.


## SECOND DEGREE REQUIREMENTS: Check with Admissions and Records Office for specific criteria.

APPLYING FOR YOUR DEGREE: You must apply for your Degree in the Admissions \& Records Office two months before the end of the semester in which you plan to complete it.

CATALOG RIGHTS: As long as you maintain continuous attendance at Shasta College, your catalog rights are protected according to the following regulations: You may elect to meet the graduation requirements in effect 1) at the time of initial enrollment or 2) at the semester of graduation, provided you have not had an interruption in attendance of more than two successive semesters. (Summer is not considered a successive semester when not enrolled but will be used to begin enrollment or maintain continuous attendance.) If you are following an earlier version of a program in which your department has discontinued or modified required courses, the department may authorize appropriate substitutions. It is advisable that you make contact with the department as soon as possible so you can accommodate any changes into your ed plan. If while enrolled you declare a new major, you should normally expect to follow the requirements in effect at the time you change your major or in effect when you file for graduation. Whether you choose option 1) or 2) concerning your major or emphasis, you may continue to follow the general education and graduation requirements listed in the catalog at the time of initial enrollment (provided you maintain catalog rights as defined above). While catalog rights hold degree requirements, they do not shield students from changes in prerequisites required in a given course. Prerequisite requirements which students must follow are those stated in course descriptions in the current catalog.

DOUBLE COUNTING: Courses may be double counted for the emphasis, the GE pattern, and/or the Multi-Cultural/Graduation requirement. For the General Studies major, the emphasis and GE pattern must total at least 36 units. For the University Studies major, the emphasis and GE must total at least 45 units.

Note: Students also prepare to transfer to many other majors at four year universities by completing the IGETC or CSU GE certificate and the major preparation courses listed at www.assist.org

## COURSE NUMBERING SYSTEM FOR SHASTA COLLEGE:

Shasta College has numbered courses to assist students in scheduling. Refer to the complete course description in the catalog for explanation of the course. Numbering is according to the following system:

| 0-99* | Baccalaureate level course. Courses certified by Shasta College as meeting transfer requirements to the California State University System. The U.C. system <br> publishes a list annually that indicates which Shasta College courses are accepted for admission. This list is available in the Transfer Center, Shasta College <br> Admissions Office, and www.assist.org. |
| :--- | :--- |
| 100-199 | Courses, primarily vocational in nature, meeting Associate Degree graduation requirements. Generally not transferable to four-year institutions. |
| 200-299 | Basic skills courses designed to enable students to succeed in college level work, or pre-collegiate occupational preparation courses. These courses do not <br> transfer or apply to an Associate Degree (Title 5, Section 55002). |
| 300-399 | Ungraded (adult education) courses designed to meet specific student needs. These courses carry no unit credit. |

*Baccalaureate level courses are those commonly taught in a four-year college or university at the freshman \& sophomore level.

## Shasta College 2012-13 Certificates

## Accounting Clerk/Bookkeeper

Agriculture-Equine Science
Ag-Equipment Operations and Maintenance
Agriculture-Horticulture
Irrigation
Landscape and Turf Management
Retail Nursery Sales
Agriculture-Natural Resources
Automotive Technology
Automotive Chassis
Automotive Electrical-Electronics
Automotive Engine Performance
Automotive Engine Repair
Automotive Heating-Air Conditioning
Automotive Powertrain
Computer Aided Drafting (CAD) Technology
Computer \& Information Systems
Cisco Networking
Computer Networking (CCNA)
Web Design
Computer Maintenance
Construction Technology
CSU - General Education
Customer Service Academy
Diesel Technology
Dietary Service Supervisor
Early Childhood Education
ECE-Family Childcare
Engineering Technology
Firefighter 1 Certificate
Firefighter 2 Certificate

Fire Tech-Wildland Firefighter 1 Academy
Geographic Information Systems
Hospitality
Baking - Culinary Arts Emphasis
Bartender - Culinary Arts Emphasis
Dining Room Management - Culinary Arts Emphasis
Dining Room Staff - Culinary Arts Emphasis
Line Cook - Culinary Arts Emphasis
Winemaking and Marketing
Hospitality Management
Culinary Arts Concentration
Hotel/Restaurant Management Concentration
Industrial Technology
IGETC - General Education
Life Management
Music
Nurse Aide/Home Health Aide
Nursing-Vocational Nursing
Office Administration
Administrative Office Assistant
Administrative Office Professional
Health Information Management
Retail Management
Theatre Arts
Transition Certificate for Students with Disabilities
Watershed Restoration
Water/Wastewater Treatment
Welding

# Shasta College 2012-2013 Associate Degree - General Education 

## General Education - $\mathbf{2 1}$ units (plus a major field of study $\mathbf{=} \mathbf{6 0}$ units)

The goal of general education is a more well-rounded individual with a broad understanding of the physical universe, people as individuals and as members of society, artistic and cultural expression, written composition, oral communication, analytical thinking, multicultural environments, and perspectives of people from other cultures and backgrounds.

In order to complete the General Education requirements, a student must complete twenty-one (21) units of study. Three units must be completed in each of the following areas: 1, Natural Science; 2, Social and Behavioral Sciences; 3, Humanities; 4-a, Language and Rationality, English Composition; 4-b,Oral Communication; 4c, Analytical Thinking, and 5, Multicultural/Living Skills. A course cannot be counted in more than one area of study with the exception of the \#6 Multicultural requirement. A four (4) quarter unit course is $2-2 / 3$ semester units and satisfies an area. Total units must equal 21 or more semester units. The course used to satisfy the Multicultural Requirement may also be used to satisfy one of the other areas if appropriate.

1. NATURAL SCIENCE: Three (3) units required. Courses in the Natural Science GE area examine the physical universe, its life forms and its natural phenomena. After successful completion of a course from this area, a student will be able to use the scientific method to conduct basic experiments, collect, analyze, and evaluate data in a lab setting, or will be able to use scientific inquiry skills related to hypothesis, prediction, assumption, interpretation and evaluation.

AGAS 19 Prin of Animal Sci
AGEH 33 Envir Horticulture
AGNR 1 Intro to Nat Res AGNR 60 Envir Science
AGNR 64 Watershed Mgmt
AGPS 20 Plant Science
AGPS 24 Soils
ANAT 1 Anatomy
ANTH 1 Phys Anthropology
ASTR 1 Astronomy

> BIOL 1 Principles of Biology
> BIOL 5 Human Biology
> BIOL 10 Gen Biology
> BIOL 11 Div of Life
> BIOL 12 Field Biology
> BIOL 14 Heredity
> BIOL 15 Entomology BIOL 60 Biology of Aging BOT 1 Botany
> CHEM 1AB Gen Chemistry CHEM 2AB Intro Chemistry

CHEM 6 Chemistry/Envir
CHEM 10 Chemistry/Lib Art
CHEM 16 Chem Prob Solv
ESCI 1 Phys Geology ESCI 5 Intro Geology ESCI 6 Ancient Life
ESCI 7 Intro/Geol of Calif ESCI 8 Planetary Geology
ESCI 9 Earthquakes
ESCI 10 Envir Geology ESCI 12 Gen Earth Science

ESCI 14 Meteorology ESCI 15 Oceanography ESCI 17 Earth Sys Science ESCI 18 Global Climate FSS 25 Nutrition GEOG 1A Phys Geog MICR 1 Microbiology NHIS 15 Natural History PHSC 1 Phys Sci Survey PHYS 2AB Gen Physic PHYS 4A Physics-Mech

PHY 1 Physiology ZOOL 1 Zoology

Or select 3 units from these 1-2 unit courses:
BOT 50, 52
ESCI 16,32,33,34,35,36
37,38,42,43,44,45,46 NHIS 65
ZOOL 15, 63
2. SOCIAL AND BEHAVIORAL SCIENCES: Three (3) units required._Courses in the Social and Behavioral Sciences GE area focus on people as individuals and as members of society. After successful completion of a course from this area, a student will be able to describe, explain, compare, and critique methods of inquiry used by the social and behavioral sciences, or will be able to apply concepts from the social sciences in order to analyze, evaluate, classify, and explain human behavior, or will be able to identify and discuss how societies and social subgroups operate.

ADJU 10 Intro to AOJ
AGAB 54 Ag Economics
AGPS 25 Calif. Water
ANTH 2 Cultural Anth*
ANTH 5 Human./Cult./Ecol
ANTH 14 Relig,Myth,Ritual*
ANTH 25 Cult. Hist Indian*
ARCH 3 Prin of Arch
ARCH 4A Field Arch.
CMST 20 Intercul. Comm.
ECE 1 Human Develop

ECE 2 Child/Family/Comm ECE 9 Child Growth \& Dev. ECON 1A/B Economics FSS 16 Marriage Family FSS 18 Adulthood/Aging FSS 60 Life Management GEOG 1A Physical Geog GEOG 1AL Phys Geog Lab GEOG 1B Cultural Geog* GEOG 5 Digital Planet GEOG 7 Calif Geography* GEOG 8 World Reg Geog*

HIST 1AB Western Civil JOUR 21 Mass Commun HIST 2/3 World Civilization* HIST 17AB US History HIST 25 African Am. Hist* HIST 35 Hist/Mexican Amer* HIST 36 History Far East HIST 38 Hist World Relig* HIST 40 Hist/Gov of CA HIST 55 Hist/Amer Frontier HIST 57 Russian History

JOUR 21 Mass Commun POLS 1 Intro Poli Science POLS 2 American Govt POLS 20 Politics/Dev World* POLS 25 Global Politics PSYC 1A Gen Psychology PSYC 5 Human Sexuality PSYC 14 Und Hum Behav PSYC 15 Soc Psychology PSYC 16 Health Psych PSYC 17 Abnormal Psych

PSYC 20 Cross Cult Psyc* PSYC 41 Cult Soc Child* PSYC 46 Hum Mem/Lrng.
SOC 1 Intro Sociology
SOC 2 Social Problems
SOC 15 Soc Mass Media
SOC 22 Soc of Aging
SOC 25 Soc Minorities*
SOC 30 Soc. Of Gender*
SOC 70 Social Welfare
3. HUMANITIES: Three (3) units required. Courses in the Humanities GE area are those which study the cultural activities and artistic expressions of human beings. After successful completion of a course from this area, a student will be able to express verbally and in writing examples of how peoples of different times and cultures relate to their environments through individual artistic expression and shared cultural traditions, will be able to critically assess and discuss examples of artworks and cultural artifacts utilizing qualitative, contextual criteria, or will be able to describe, explain, discuss, evaluate, compare and contrast, theories that philosophers have used to understand the nature of reasoning, reality and value.

| ART 1 Intro to Art | CMST 30 Oral Interpret | ENGL 18 African Amer Lit* | HUM 2 Explor Humanities | PHIL 8 Logic |
| :---: | :---: | :---: | :---: | :---: |
| ART 2 History of Art | ENGL 1B Lit \& Comp | ENGL 19 Bible as Literature | HUM 4 Human thru Film | PHIL 10 Life/Death Moral |
| ART 3 Western Art | ENGL 10AB World Lit* | ENGL 20 World Mythology* | HUM 70 Explor Cont TV | RUSS1/2/3/4 Russian* |
| ART 4 World Art* | ENGL 11A/B Survey/Am. Lit | ENGL 24 Multicult Persp* | JAPN 1/2/3/4 Japanese* | SPAN 1/2/3/4 Spanish* |
| ART 6 History/Modern Art | ENGL 12 Short Fiction | ENGL 25 Linguistics | JAPN 19+20 Japanese Conv | SPAN 19 Span Conv/Cult |
| ASL 1 Am. Sign Lang 1* | ENGL 13A/B Survey Eng Lit | ENGL 31 Creative Writ | MUS 10 Music Apprec | SPAN 20 Span Conver |
| ASL 2 Am. Sign Lang 2* | ENGL 14 Drama as Lit | ENGL 33 Fiction and Film | MUS 11 Hist Jazz \& Rock | THTR 1 Intro to Theatre |
| ASL 3 Am. Sign Lang 3* | ENGL 15 Lit Women | ENGL 36 Children's Lit | MUS 14 World Music* | THTR $520^{\text {th }}$ Cent Theatre |
| ASL 4 Am. Sign Lang 4* | ENGL 16 Poetry | FREN 1/2/3/4 French* | PHIL 6 Intro to Philosophy | THTR 8 Theatre History I |
| CHIN 1 Mandarin Chinese* | ENGL 17 Shakespeare | GERM 1/2/3/4 German* | PHIL 7 Ethics:Right/Wrong | THTR 9 Theatre History II |

4. LANGUAGE AND RATIONALITY: Courses in the Language and Rationality GE Area are those which study the principles and applications of language toward logical thought, clear and precise expression and critical evaluation or communication in whatever symbol system the student uses.
a. English Composition: Three (3) units required. Courses fulfilling the written composition requirement are designed to include both expository and argumentative writing. After successful completion of a course from this area, a student will be able to write clear, logically organized essays using expository and argumentative modes and applying conventions of documentation when appropriate.
ENGL 1A College Composition
BUAD 66 Business Communication
b. Oral Communication: Three (3) units required. Courses fulfilling the oral communication requirement are designed to emphasize the psychological, cultural and linguistic factors which affect human communication, including how communication operates in various situations. Course content includes an emphasis on the ability to speak and listen effectively, as well as verbal and non-verbal communication. After successful completion of a course from this area, a student will be able to identify and discuss the role oral communication plays in academic, social, and professional endeavors; and will be able to demonstrate oral competency by constructing messages appropriate to particular communication situations covered in their particular courses.

CMST 10 Interpersonal Communication
CMST 20 Intercultural Communication*

CMST 30 Oral Interpretation
CMST 40 Argument/Debate

CMST 54 Small Group Comm.
CMST 60 Public Speaking

## 2012-13 Associate Degree - General Education (continued)

c. Analytical Thinking: Three (3) units required. Courses fulfilling the analytical thinking requirement include mathematics, logic, statistics, computer language and programming and related disciplines. Courses in this area may be used to meet the math competency requirement. After successful completion of a course from this area, a student will be able to apply logical reasoning to collect and critically evaluate information, or construct a formal argument complete with support and reach a logical conclusion, or apply logical reasoning to solve problems.

## See Math Competency Requirement listed below

| AS Level Math : | MATH 9 Survey of Calculus | Other acceptable courses (if math |
| :--- | :--- | :--- |
| MATH 102 Inter Algebra | MATH 10 Trigonometry | competency has been satisfied): |
| MATH 110 Essential Math | MATH 11 Patterns of Math | CIS 2 Intro Computer Science |
|  | MATH 13 College Algebra | CIS 60 Visual Basic Programming |
| Other Math Courses: | MATH 14 Statistics | CIS 61 C++ Lang Programming |
| MATH 2 Precalculus | MATH 17 Calculus App Soc/Life Science | CIS 62 Java Programming |
| MATH 3AB Calculus | MATH 41AB Conc./Elem Math | CIS 63 Assembler Lang Program. |
| MATH 8 Finite Mathematics |  | PHIL 8 Logic |

5. MULTICULTURAL/LIVING SKILLS-- Three (3) units required, from either area. Courses in the Multicultural/Living Skills GE area prepare students to live and work in an increasingly multicultural environment or encourage development as integrated physiological, social and psychological beings. After successful completion of a course from this area, a student will be able to compare and contrast perspectives of various cultural groups as defined by religion, ethnicity, race, gender, class or other important social categories; or identify "at risk" patterns of physical or academic or social or emotional or financial behavior and apply their knowledge and skills to assess these patterns and make recommendations for altering them; or develop the criteria for personal or professional success in a given area and then create a specific action plan that targets the criteria-along with a timeline for accountability and evaluation.

MULTICULTURAL COURSES:
ANTH 2 Cultural Anthropology*
ANTH 14 Religion/Myth/Ritual*
ANTH 25 Cult/Hist North Am Indian*
ART 4 World Art *
CMST 20 Intercultural Comm.*
ENGL 10A/B World Lit*
LIVING SKILLS:
AGNR 11 Environ. Ethics
BUAD 10 Intro./ Business
BUAD 45 Human Relations/Job
ECE 1 Human Development
ECE 2 Child/Family/Community
ECE 9 Child Growth \& Dev.
FSS 16 Marriage and Family
FSS 18 Adulthood/Aging

ENGL 18 African American Lit*
ENGL 20 World Mythology*
ENGL 24 Multicultural Lit*
GEOG 1B Cultural Geog*
GEOG 7 California Geog*
GEOG 8 World Regional Geog*

## FSS 25 Nutrition

FSS 26 Nutrition/Life Span
FSS 46 Personal Finance FSS 60 Life Management
HLTH 1 Health and Wellness\#
HLTH 2 Nutrition and Fitness
HLTH 3 Substance Abuse Awareness PE 4 Lifetime Fitness

HIST 2/3 World Civilization* HIST 25 African American History*
HIST 36 History of the Far East* HIST 38 History/World Religion* MUS 14 World Music*
POLS 20 Politics/Developing World*

PSYC 5 Human Sexuality
PSYC 14 Under.Hum. Beh
REGN 20+33 Med Sur Nrs II/III SOC 22 Sociology of Aging STU 1 College Success

PSYC 20 Cross Cultural Psychology*
PSYC 41 Cultural Social Childhood*
SOC 25 Sociology of Minorities*
SOC 30 Sociology of Gender*
6. MULTICULTURAL REQUIREMENT - Three (3) units required. (Note: A course in this area may be double-counted to also satisfy one of the other areas numbered 1-5. Courses which can be double-counted are marked with an asterisk.) - Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to compare and contrast perspectives of various cultural groups as defined by religion, ethnicity, race, gender, class or other important social categories.

ADJU 24 Multicult Issues/Law Enf
ANTH 2 Cultural Anth
ANTH 14 Rel, Myth \& Ritual
ANTH 25 Cult/Hist North Am Indian
ART 4 World Art
ASL 1, 2, 3, 4 American Sign Lang
CHIN 1 Mandarin Chinese
CMST 20 Intercultural Comm.
ECE 28 Teach Div. Society

ENGL 10A World Lit (to 1500)
ENGL 10B World Lit (after 1500)
ENGL 18 African Amer Lit
ENGL 20 World Mythology
ENGL 24 Multicul Perspec/Amer Lit
FREN 1, 2, 3, 4 French
GEOG 1B Cultural Geography
GEOG 7 California Geography
GEOG 8 World Regional Geog

GERM 1, 2, 3, 4 German
HIST 2 World Civ to 1500 C.E.
HIST 3 World Civ 1500 to Present HIST 25 African American History HIST 35 History/Mexican Americans HIST 36 History/Far East
HIST 38 History/World Religions
JAPN 1, 2, 3, 4 Japanese
MUS 14 World Music

POLS 20 Politics of Dev World
PSYC 20 Cross-Cultural Psychology
PSYC 41 Cul/Soc Context Childhood
RUSS 1, 2, 3, 4 Elem/Int Russian
SOC 25 Sociology of Minorities
SOC 30 Sociology of Gender
SPAN 1, 2, 3, 4 Spanish

## 7. COMPUTER LITERACY REQUIREMENT

To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:

- CIS 1 Computer Literacy with a grade of $C$ or better.
- AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better.
- Three units to include the coursework options listed below with a grade of $C$ or better:
$\checkmark$ CIS 70 (Windows); and
$\checkmark$ OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and
$\checkmark$ One additional class from: CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (Powerpoint). Note: MOS or MCAS certification will substitute for the equivalent software class.
- Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
- Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
- Possess IC $^{3}$ certification.
- Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
- Document completion of a computer literacy requirement at another college.


# Shasta College 2012-13 <br> California State Universities - General Education 

$\overline{\text { Shasta College students will meet the General Education requirements for all campuses of the California State University system by completing the following }}$ General Education Program. Shasta College may certify a maximum of 39 semester units from Categories A - E. Note: No more than 30 semester units may be certified from Categories B - D. Courses listed more than once may be used to fulfill the requirements of one category only.
An additional 9 units of upper division work must be taken at a CSU campus to complete the full 48 -unit General Education requirement.
CATEGORY A: Students shall select a minimum of nine (9) units in communications in the English language. Students must select one course from each area.
A1: Oral Communication
CMST 10: Interpersonal Communication CMST 54: Small Group Communication CMST 60: Public Speaking
A2: Written Communication
ENGL 1A: College Composition
A3: Critical Thinking
ENGL 1B: Literature \& Composition
ENGL 1C: Crit. Reasoning/Reading/Writ
PHIL 8: Logic
CMST 40: Argumentation and Debate
CATEGORY B: Students shall select a minimum of nine (9) units in the physical universe and its life forms and in mathematical concepts and quantitative reasoning. Students shall select at least three units from each area. One of the courses must have a laboratory. Additional courses may be selected from any area. Courses underlined are designated as laboratory courses.

B1/B3: Physical Sciences
ASTR 1: Astronomy
AGPS 24: Soils
CHEM 1A: General Chemistry
CHEM 1B: General Chemistry CHEM 2A: Introduction to Chemistry
CHEM 2B: Intro to Organic \& Bio Chemistry
CHEM 6: Intro. Chemistry Applied to Envir.
CHEM 10: Chemistry for Liberal Arts
CHEM 11: Chemistry Lab for Liberal Arts
CHEM 16: Chemical Problem Solving

ESCI 1: Physical Geology
ESCI 2: Geology, Historical
ESCI 3: Mineralogy \& Crystal Optics
ESCI 4: Rock Origins \& Relationships
ESCI 5: Introduction to Geology
ESCI 6: Ancient Life
ESCI 7: Intro to Geology of California
ESCI 8: Planetary Geology
ESCI 9: Earthquakes, Volcanoes
ESCI 10: Environmental Geology
ESCI 12: General Earth Science

ESCI 14: Meteorology
ESCI 15: Oceanography
ESCI 17: Earth System Science
ESCI 18: Global Climate: Past, Present, Future
GEOG 1A: Physical Geography
GEOG 1AL: Physical Geography Lab
PHSC 1: Physical Science Survey
PHYS 2A: Gen. College Physics
PHYS 2B: Gen. College Physics
PHYS 4A: Physics - Mechanics

BIOL 1: Principles of Biology
BIOL 15: Entomology
BIOL 5: Human Biology
BIOL 6: Human Biology
BIOL 10: General Biology
BIOL 11: Diversity of Life
BIOL 12: Field Biology
BIOL 14: Heredity
BOT 1: General Botany
ESCI 6: Ancient Life
MICR 1: Microbiology
NHIS 15: Natural History
PHY 1: Physiology
ZOOL 1: General Zoology

B4: Mathematical Concepts and Quantitative Reasoning

## MATH 2: Pre-Calculus Mathematics

MATH 3A, 3B, 4A: Calculus
MATH 4B: Differential Equations
MATH 6: Linear Algebra
MATH 8: Finite Mathematics

MATH 9: Survey of Calculus
MATH 10: Plane Trigonometry
MATH 11: Patterns of Mathematical Thought
MATH 13: College Algebra
MATH 14: Introduction to Statistics

MATH 41A: Concepts of Elementary Math
MATH 41B: Concepts of Elementary Math
MATH 17: Calculus App. Soc \& Life Sciences

CATEGORY C: Students shall select a minimum of nine (9) units among the arts, literature, philosophy, and foreign languages, with at least one course in the arts and one in the humanities.

C1: Arts
ART 1: Introduction to Art
ART 2: History of Western Art
ART 3: Western Art, Renaissance to Cont.
**ART 4: World Art
ART 6: History of Modern Art
CMST 30: Oral Interpretation
C2: Humanities
ASL 1 American Sign Language 1
ASL 2 American Sign Language 2
ASL 3 American Sign Language 3
ASL 4 American Sign Language 4
CHIN 1: Mandarin Chinese
ENGL 1B: Literature \& Composition
**ENGL 10A: World Literature to 1500
**ENGL 10B: World Literature after 1500
ENGL 11A, 11B: Survey of American Lit.
ENGL 12: Intro to Short Fiction
ENGL 13A, 13B: Survey of English Lit.
ENGL 14: Drama as Lit
ENGL 15: Intro. to Lit. By/About Women
ENGL 16: Poetry

ENGL 14: Drama as Lit
HUM 2: Exploring the Humanities
HUM 4: Humanities Through Film
MUS 10: Music Appreciation
MUS 11: History of Jazz and Rock
**MUS 14: World Music

ENGL 17: Intro to Shakespeare
*ENGL 18: African American Lit
ENGL 19: Survey of Bible as Literature
**ENGL 20: World Mythology
*ENGL 24: Multicultural American Lit.
ENGL 25: Linguistics
ENGL 31: Creative Writing
ENGL 33: Fiction and Film
ENGL 36: Children's Lit
FREN 1, 2: Elementary French
FREN 3, 4: Intermediate French
GERM 1, 2: Elementary German
GERM 3, 4: Intermediate German
HUM 2: Exploring the Humanities

THTR 1: Introduction to Theatre
THTR 5: 20th Century Theatre
THTR 8: Theatre History I
THTR 9: Theatre History II

HUM 4: Humanities Through Film HUM 70: Exploring Contemporary TV
JAPN 1, 2: Elementary Japanese
JAPN 3, 4: Intermediate Japanese
JAPN 19, 20: Japanese Conversation 1,2
PHIL 6: Introduction to Philosophy
PHIL 7: Ethics: Understanding Right \& Wrong
PHIL 8: Logic
PHIL 10: Life/Death Moral Issues
RUSS 1, 2: Elementary Russian
RUSS 3, 4: Intermediate Russian
SPAN 1, 2: Elementary Spanish
SPAN 3, 4: Intermediate Spanish
SPAN 19, 20: Span Conversation \& Cult I \& II

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.

Shasta College 2012-13 California State Universities - General Education (continued)
CATEGORY D: Students shall select a minimum of nine (9) units in social, political and economic institutions and behavior, and their historical background, with courses taken in at least two disciplines.

## D1: Anthropology and Archaeology

${ }^{* *}$ ANTH 2: Cultural Anthropology $\quad$ ANTH 5: Humanity, Culture \& Ecology
**ARCH 3: Principles of Archaeology
**ANTH 14: Religion, Myth, and Ritual
*ANTH 25: Culture \& History/No. Am. Indian

## D2: Economics

AGAB 54: Agricultural Economics
ECON 1A, 1B: Principles of Economics
D3: Ethnic Studies
*ANTH 25: Culture \& Hist/North Am. Indian
*HIST 35: History of Mexican Americans
*SOC 25: Sociology of Minorities
*GEOG 7: California Geography
*PSYC 20: Cross-cultural Psychology
*HIST 25: African American History
D4: Gender Studies
SOC 30: Sociology of Gender
D5: Geography
**GEOG 1B: Cultural Geography
**GEOG 8: World Regional Geography
GEOG 5: Digital Plant
*GEOG 7: California Geography
D6: History

HIST 1A,1B: History of Western Civ.
HIST 2: World Civilization to 1500 C.E.
HIST 3: World Civilization 1500 to Present
*HIST 25: African American History
*HIST 35: History of Mexican Americans
**HIST 36: History of the Far East
**HIST 38: History of World Religion
HIST 17A, 17B: U.S. History

ECE 1: Human Development
ECE 9: Child Growth \& Development
JOUR 21: Intro. to Mass Communications

HIST 40: History \& Govern. California HIST 55: History of American Frontier HIST 57: Russian History

D7: Interdisciplinary Social or Behavorial Science
AGNR 11: Environmental Ethics

PSYC 5: Human Sexuality
*PSYC 41: Cultural/Soc Context of Chldhd
*CMST 20: Intercultural Communication

POLS 2: Intro. to Amer. Government
**POLS 20: Politics of the Developing World
ADJU 10: Intro to AOJ
POLS 1: Intro. to Political Science

## D9: Psychology

PSYC 1A: General Psychology
PSYC 14: Understanding Human Behavior
PSYC 15: Social Psychology
D10: Sociology and Criminology
SOC 1: Introduction to Sociology
SOC 2: Social Problems
SOC 15: Sociology of Mass Media

PSYC 16: Health Psychology
PSYC 17: Abnormal Psychology
*PSYC 20: Cross-Cultural Psychology

SOC 22: Sociology of Aging

## AMERICAN HISTORY AND GOVERNMENT REQUIREMENTS FOR GRADUATION FROM A CSU CAMPUS

Completion of a course in American History and a course in American Government is a requirement to graduate from any of the 23 CSU universities.
At Shasta College, HIST 17A or HIST 17B, and POLS 2 will satisfy the requirement.
CATEGORY E: Students shall select a minimum of three (3) units in lifelong understanding and development of themselves as integrated physiological, social and psychological entities.
E1:
BIOL 60: Biology of Aging
ECE 1: Human Development
ECE 2: Child, Family, Community
ECE 9: Child Growth \& Development
FSS 16: Marriage and Family
POLS 25: Global Politics

FSS 18: Adulthood and Aging
FSS 25: Nutrition

FSS 26: Nutrition Through the Life Span
FSS 60: Life Management
HLTH 1: Health and Wellness
HLTH 2: Nutrition and Fitness
HLTH 3: Substance Abuse Awareness
PSYC 1A: General Psychology

PSYC 5: Human Sexuality
PSYC 14: Understanding Human Behavior
PSYC 16: Health Psychology
SOC 22: Sociology of Aging
STU 1: College Success

CHICO STATE requires two courses to satisfy the U.S. Diversity \& Global Cultures requirement. Both courses may be part of the 39-unit General Education requirement.
a. Courses with one asterisk (*) meet the U.S. Diversity requirement and are "concerned primarily with the aspirations and history of ethnic subcultures". They are ANTH 25, CMST 20, ENGL 18, ENGL 24, GEOG 7, HIST 25, HIST 35, PSYC 20, PSYC 41, SOC 25.
b. Courses with two asterisks $\left(^{* *}\right)$ meet the Global Cultures requirement and are "concerned primarily with cultures and societies outside Western Heritage". They are ANTH 2, ANTH 14, ARCH 3, HIST 36, HIST 38, ENGL 10A, ENGL 10B, ENGL 20, ART 4, GEOG 1B, GEOG 8, MUS 14, POLS 20.

Courses taken for CSU General Education are applied to categories based on the General Education list for the year they are completed.
This is the approved list for courses taken Fall 2011 through Summer 2012. See www.assist.org for prior years.

# Shasta College 2012-13 IGETC <br> (Intersegmental General Education Transfer Curriculum) 

Students who are planning to transfer to the University of California system or who are undecided about whether to transfer to a UC or CSU may satisfy general education requirements with IGETC. The IGETC will permit a student to transfer from a community college to a campus in either the UC or CSU system without the need to take additional lower division general education courses to satisfy campus general education requirements. Transfer students to UC have the option of following IGETC or completing the general education requirement at the campus they plan to attend. Students pursuing majors that require extensive lower division preparation may not find the IGETC option to be advantageous. Check with a counselor before choosing your general education pattern.

IGETC courses must be completed with a " C " grade or better ( P is acceptable).

## AREA 1 - ENGLISH COMMUNICATION

Group A: English Composition (one course)
ENGL 1A: College Composition
Group B: Critical Thinking/English Composition (one course)
ENGL 1B: Literature and Composition
ENGL 1C: Critical Reasoning, Reading and Writing
FOR CSU ONLY:
Group C: Oral Communication (one course) CMST 10: Interpersonal Communication CMST 54: Small Group Communication CMST 60: Public Speaking

## AREA 2 - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING (one course):

| MATH 2: Pre-Calculus | MATH 4A/4B: Calculus/Diff. Equations | MATH 13: College Algebra |
| :--- | :--- | :--- |
| MATH 3A: Calculus | MATH 6: Linear Algebra | MATH 14: Intro to Statistics |
| MATH 3B: Calculus | MATH 8: Finite Math | MATH 17: Calc. App, Soc. Life Sciences |

AREA 3 - ARTS AND HUMANITIES (three courses; at least one course from the Arts and one from the Humanities):

ARTS:
ART 1: Introduction to Art
ART 2: History of Western Art
ART 3: Western Art, Renaissance to Cont.
ART 4: World Art
HUMANITIES:
ASL 2 American Sign Language 2
ASL 3 American Sign Language 3
ASL 4 American Sign Language 4
ENGL 10A/B: World Literature
ENGL 11A/B: Survey of American Lit.
ENGL 12: Intro to Short Fiction
ENGL 13A/B: Survey of English Lit.
ENGL 14: Survey of Drama as Lit
ENGL 15: Lit. By and About Women
ENGL 16: Poetry
ENGL 17: Intro to Shakespeare
ENGL 18: African American Literature
ENGL 19: Survey of the Bible as Literature
ENGL 20: World Mythology
ENGL 24: Multicult. Perspectives in Amer Lit

ART 6: History of Modern Art
MUS 10: Music Appreciation
MUS 11: History of Jazz and Rock
MUS 14: World Music

ENGL 25: Linguistics
ENGL 33: Fiction and Film
ENGL 36: Children's Lit
FREN 2: Elementary French
FREN 3/4: Intermediate French
GERM 2: Elementary German
GERM 3/4: Intermediate German
HIST 25: African American History
JAPN 2: Elementary Japanese
JAPN 3/4: Intermediate Japanese
SPAN 2: Elementary Spanish
SPAN 3/4: Intermediate Spanish

THTR 1: Introduction to Theatre +
THTR 5: 20th Century Theatre
THTR 8: Theatre History I
THTR 9: Theatre History II

HUM 2: Exploring Humanities
HUM 4: Humanities Through the Film
HUM 70: Exploring Contemporary TV
PHIL 6: Intro. to Philosophy
PHIL 7: Ethics: Understand Right/Wrong
PHIL 10: Life and Death Moral Issues
RUSS 2: Elementary Russian
RUSS 3: Intermediate Russian
RUSS 4: Intermediate Russian

AREA 4 - SOCIAL AND BEHAVIORAL SCIENCES (three courses from at least two disciplines):

ANTH 2: Cultural Anthropology HIST 1A: History of Western Civilization
ANTH 5: Humanity, Culture and Ecology HIST 1B: History of Western Civilization
ANTH 14: Religion, Myth, and Ritual
ANTH 25: Culture/History of N. Amer. Indian+
ARCH 3: Principles of Archaeology
ECE 1: Human Development
ECE 9: Child Growth and Development
ECON 1A: Principles of Economics (Micro)
ECON 1B: Principles of Economics (Macro)
GEOG 1A: Physical Geography
GEOG 1B: Cultural Geography
GEOG 7: California Geography
GEOG 8: World Geography

HIST 2: World Civilization to 1500 C.E. HIST 3: World Civilization 1500 to Present HIST 17A: U.S. History and Government HIST 17B: U.S. History and Government HIST 25: African American History
HIST 35: History of Mexican Americans
HIST 36: History of the Far East
HIST 38: History of World Religions
HIST 40: History \& Government of CA
HIST 55: History of the American Frontier
HIST 57: Russian History of 20th Century
POLS 1: Introduction to Political Science
POLS 2: Introduction to American Government POLS 20: Politics of the Developing World
POLS 25: Global Politics

PSYC 1A: General Psychology
PSYC 5: Human Sexuality
PSYC 14: Understand. Human Behavior
PSYC 15: Social Psychology
PSYC 17: Abnormal Psychology
PSYC 20: Cross-cultural Psychology
PSYC 41: Cultural/Soc Context-Childhood
PSYC 46: Human Memory \& Learning
SOC 1: Introduction to Sociology
SOC 2: Social Problems
SOC 15: Sociology of Mass Media
SOC 22: Sociology of Aging
SOC 25: Sociology of Minorities
SOC 30: Sociology of Gender
+Transfer credit may be limited by either UC or CSU or both (usually due to duplication of content). Students should consult with a counselor for additional information.

[^2]
## 2012-13 IGETC (continued)

AREA 5 - PHYSICAL AND BIOLOGICAL SCIENCES (two courses, one Physical Science and one Biological Science for a minimum of 7 units; at least one course must include a laboratory (underlined).

## PHYSICAL SCIENCES:

ASTR 1: Astronomy
CHEM 1A: General Chemistry
CHEM 1B: General Chemistry
CHEM 2A: Intro to Chemistry +
CHEM 2B: Intro to Org \& Bio Chemistry+
CHEM 6: Intro to Chem Applied Environment
CHEM 10: Chemistry for Liberal Arts+
CHEM 11: Chemistry Lab/Liberal Arts +
CHEM 16: Chemical Problem Solving
CHEM 70, 71: Organic Chemistry
ESCI 1: Physical Geology
BIOLOGICAL SCIENCES:
AGNR 60: Environmental Science
AGNR 61: Environmental Science Lab
AGPS 20: Plant Science
ANAT 1: Human Anatomy
ANTH 1: Physical Anthropology
BIOL 1: Principles of Biology

ESCI 2: Historical Geology
ESCI 3: Mineralogy \& Crystal Optics
ESCI 4: Rock Origins \& Relationships
ESCI 5: Introduction to Geology+
ESCI 6: Ancient Life
ESCI 7: Intro to Geology of California
ESCI 8: Planetary Geology
ESCI 9: Earthquakes, Volcanoes
ESCI 10: Environmental Geology
ESCI 12: Earth Science Survey+
ESCI 14: Meteorology

BIOL 5: Intro to Human Biology+
BIOL 6: Intro to Human Biology Lab+
BIOL 10: General Biology+
BIOL 14: Heredity (PHY 10)
BIOL 15: Entomology (ZOOL 15)
BOT 1: General Botany

ESCI 15: Oceanography
ESCI 17: Earth System Science
ESCI 18: Global Climate: Past, Present, \& Future
GEOG 1A: Physical Geography
PHSC 1: Physical Science Survey+
PHYS 2A: General College Physics +
PHYS 2B: General College Physics +
PHYS 4A: Physics Mechanics+

MICR 1: Microbiology
NHIS 15: Natural History
PHY 1: Physiology
ZOOL 1: General Zoology

Proficiency is required by UC. CSU transfers do not need to meet this requirement. Proficiency is defined as two years of high school study in the same language with a "C" grade or better. If you have not satisfied this requirement in high school, you must take one of these courses:

| ASL 1 American Sign Language 1 | GERM 1: Elementary German | SPAN 1: Elementary Spanish |
| :--- | :--- | :--- |
| CHIN 1: Mandarin Chinese | JAPN 1: Elementary Japanese |  |
| FREN 1: Elementary French | RUSS 1: Elementary Russian |  |

CSU GRADUATION REQUIREMENT IN U.S. HISTORY AND AMERICAN IDEALS (Two courses, one from each group):

## GROUP 1:

HIST 17A: U.S. History
HIST 17B: U.S. History
GROUP 2:
POLS 2: Introduction to American Government
+Transfer credit may be limited by either UC or CSU or both (usually due to duplication of content). Students should consult with a counselor for additional information.

This is the approved list for courses taken Fall 2011 through Summer 2012. See www.assist.org for prior years.

## Associate of Arts - University Studies

The Associate of Arts degree, University Studies, is a degree program designed for transfer students who plan to obtain a Bachelor's degree. Completion of Option 1 or Option 2 will satisfy all-lower division general education requirements for the University of California or the California State University, respectively. Option 3 can be utilized with planning to meet the requirements of an independent or out-of-state university. Option 3 can also be used for majors that have many lower division courses required for the major and in cases where the CSU or UC has approved general education modifications. See www.assist.org and a counselor before selecting your GE Option and Area of Emphasis.

## Choose one GE Option, one Emphasis, and transferable electives to total 60 units for the AA degree.

* General Education - Choose Option 1, 2 or 3.

OPTION 1: IGETC (Intersegmental General Education Transfer Curriculum)
Students who are planning to transfer to the University of California system or who are undecided about whether to transfer to a UC or CSU may satisfy general education requirements with IGETC.

1. Complete the 33-37 unit IGETC pattern
2. Complete all IGETC courses with a grade of "C" or better.
3. Complete additional courses from an emphasis to meet the lower division requirements in your major and then electives to reach 60 units. UC transfer students must select all 60 units from courses on the UC transferable course list. (See www.assist.org)
4. Achieve a minimum grade point average of 2.0. [UC will require a minimum transfer GPA of 2.4 . A higher GPA will be required for admission to most campuses and for high demand majors.] All courses in the area of emphasis must be completed with a C or better.

OPTION 2: CSU GE (California State Universities - General Education)
Students who are planning to transfer to one of the 23 campuses of the California State University system may satisfy general education requirements with the CSU pattern.

1. Complete the 39-unit CSU GE pattern.
2. Complete Communication, English, Critical Thinking, and Math requirements (Area A1, A2, A3 and B4) each with a grade of "C" or better.
3. Recommend completion of HIST 17A or 17B; and POLS 2 prior to transfer. These two courses are CSU graduation requirements and may be included as part of the 39-unit pattern.
4. Complete additional courses from an emphasis to meet the lower division requirements in your major and then electives to reach 60 units.
5. Achieve a minimum grade point average of 2.0 [A higher GPA will be required for admission to some campuses and for high demand and impacted majors.] All courses in the area of emphasis must be completed with a C or better.

OPTION 3: Independent, Out-of-state universities, and high unit/specialized majors
Complete 30 units to satisfy a GE-modified plan as indicated below:

CSU GE Pattern:
Select one course from each Category.
CATEGORY A1: Oral Communication
CATEGORY A2: English Composition
CATEGORY B1 or B2: Science course
CATEGORY B4: Transfer-level math course
CATEGORY C1 or C2: Arts or Humanities
CATEGORY D:
Social, Political and Economic institutions, and Behavior
*Multicultural course
Select additional courses from categories A3, B, C, D, or E from two different areas to total 30 or more GE units.

IGETC GE Pattern:
Select one course from each Area.
AREA 1-GROUP A English Composition
AREA 1-GROUP C Oral Communication
AREA 2 Mathematical Concepts
AREA $3 \quad$ Arts or Humanities
AREA 4 Social and Behavioral Sciences
AREA $5 \quad$ Physical or Biological Sciences
*Multicultural course
Select additional courses from AREA 1B, 3, 4, or 5 from two different areas to total 30 or more GE units.

* Note: Any student completing the IGETC or CSU General Education requirements with the inclusion of a multicultural course will also have met the general education requirements for the Shasta College associate degree.
* Emphasis: Choose one of the University Studies emphases of 18 or more units to correspond with your choice of transfer major. Note that each university determines its own list of courses required for the major, so completion of an emphasis does not guarantee that all transfer major courses have been completed nor does it guarantee admission to the University. See a Counselor for comprehensive planning.
* Multicultural requirement
* Computer competency requirement
* Electives: Complete transferable electives to total 60 or more transferable units.
* Course requirements: All courses in the area of emphasis must be completed with a C or better.


## Areas of Emphasis

## University Studies: Agriculture Sciences - 18 units

The emphasis in Agriculture Sciences is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in Agriculture, Agriculture Business, and Horticulture.

Select 12-18 units (see a counselor to select the courses appropriate for your transfer university):
AGAB $51 \quad$ Agriculture Accounting
AGAB 54 Agriculture Economics
AGAS 11 Livestock Feeding and Nutrition
AGAS 19 Principles of Animal Science
AGPS 20 Plant Science
AGPS 24 Soils
CHEM 2A General Chemistry
Select the remaining $0-6$ transferable units from the following courses:
AG 1, 6, 9, 58, 94, 97, 98; AGAS 10, 11, 15, 19, 30; AGEH 22, 23, 26, 27, 28, 29 , 31, 31,1, 31.2, 31.3, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 60, 71, 72, 75, 94, 97, 98; AGEQ 12, 13, 14, 21; AGMA 42, 44; AGNR 1, 4, 6, 10, 11, 12, 50, 51, $52,53,55,60,61,64,65,66,69,70,83,94,97$; AGPS 25; AGSA 50, 56; AGVETT 1, 2, 3, 4, 5, 6, 7, 16; AGVIT 80, 81; CHEM 2B; MATH 14

## University Studies: Allied Health - 20 units

The emphasis in Allied Health is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in Nursing or in other allied health fields.

Complete the following:
ANAT 1 Human Anatomy
CHEM 2A Introduction to Chemistry
MICR 1 Microbiology
PHY $1 \quad$ Physiology

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.

## University Studies: Behavioral Science - 18 units

The Behavioral Sciences focus on the understanding of human beings, their actions and interactions, decision making processes, communication strategies, and the methods of inquiry used in the field. The A.A. in University Studies, Behavioral Sciences emphasis is a good option for students wishing to transfer to a four-year college or university to pursue a baccalaureate degree in anthropology, psychology, social work, and sociology.

Complete the following:
PSYC 1A General Psychology
MATH 14 Statistics
SOC 1 Intro to Sociology
BIOL 1, 5, 6, 10, or PHY 1
ANTH 2 Cultural Anthropology
ECE 1 Human Development

## University Studies: Biological Sciences - $\mathbf{1 8}$ units

The Biological Sciences emphasis is designed to provide the lower division major preparation for transfer in Biological Sciences.

Complete the following:
BIOL 1 Principles of Biology
BOT 1 General Botany
ZOOL 1 General Zoology
CHEM 1A General Chemistry
CHEM 1B General Chemistry

## University Studies: Business Administration - 18 units

The emphasis in Business Administration is designed to provide students with the common core of lower division courses required by most universities to transfer and pursue a baccalaureate degree in Business Administration. This includes business degrees with options such as accounting, finance, human resources management, international business, management, operations management, and marketing. See a counselor before selecting your electives.

| Complete the following: |  |
| :--- | :--- |
| ACCT 2 | Financial Accounting |
| ACCT 4 | Managerial Accounting |
| ECON 1A | Principles of Microeconomics |
| ECON 1B | Principles of Macroeconomics |
|  |  |
| Select 6 units: |  |
| MATH | $8,9,3 A, 14$ |
| BUAD | 6,10 |
| CIS | 1 |

## University Studies: Child Development - $\mathbf{1 8}$ units

The Child Development emphasis is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in Child Development or Early Childhood Education.

Complete the following 12 units:
ECE 1 Human Development OR
ECE $9 \quad$ Child Growth and Development
ECE 2 Child, Family, and Community
ECE $7 \quad$ Early Childhood Observation and Assessment
ECE 15 Child Health, Safety and Nutrition
Choose 6 additional units from the following:
ECE 8, 17, 20, 26, 28, 52

## University Studies: Criminal Justice - 18 units

The emphasis in Criminal Justice is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in Criminal Justice.

## Complete the following:

| ADJU 10 | Intro to Administration of Justice <br> ADJU 15 |
| :--- | :--- |
| Concepts of Criminal Law |  |

Select 12 additional transferable units:

University Studies: Earth System Science - 22 units
Earth System Sciences represents an emerging trend in the sciences and many universities offer a degree or option along this track (i.e. Earth Science, Planetary Science). This academic plan is intended to support the transfer student interested in the bachelor's degree as it includes courses that define major portions of the Earth System, including geosphere, hydrosphere, atmosphere, and biosphere focused courses, and Earth's position in space.

Complete the following course:
ESCI $17 \quad$ Earth System Science
And select 11 or more units from the following to include at least two courses that focus on different portions of the Earth System (geosphere, hydrosphere,
atmosphere, and biosphere):

| AGNR | and |
| :--- | :--- |
| AGNR |  |
| ASTR | 1 |
| BIOL | 1,10 |
| ESCI | $1,14,15,18$ |

Select the remaining transferable units from the following courses:
Related Science courses:

| RIOL | 11,12 |
| :--- | :--- |
| CHEM | 1 B |
| ESCI | $2,6,10$ |
| NHIS 15 | Natural History |
| PHYS 2B | General College Physics |

Courses from supporting disciplines:
AGNR 1
$\begin{array}{ll}\text { AGNR } & 83 \\ \text { CIS }\end{array}$
GIS $\quad 1,10,22$
MATH $3 \mathrm{~B}, 14$

## University Studies: Engineering - 26 units

The emphasis in Engineering is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in the various fields of engineering. This includes Civil Engineering, Computer Engineering, Electrical Engineering, and Mechanical Engineering. See a counselor for the complete list of courses required for your engineering field and university -- the requirements typically total many more than 26 units and the general education areas are usually modified (see option \#3).

Complete the following:
MATH 3A Calculus
MATH 3B Calculus
MATH 4A Calculus
PHYS 4A Physics (Mechanics)
PHYS 4B Physics (Electricity and Magnetism)
Select 6 units:
CHEM 1A, ENGR 17, 35, 45, CIS 61, MATH 4B or PHYS 4C
General Education units are modified for this major.

## University Studies: Geology - 20 units

Geology is a field-based study of earth materials, processes and history. All courses in this plan apply theory to field situations and the degree requires the completion of field-based classes. This approach should adequately prepare the transfer student for further and more intensive field experiences as they work to complete the bachelor's degree at a 4-year school.

## Complete the following courses:

ESCI 1 Physical Geology
ESCI 2 or 6 Historical Geology or Ancient Life
And select one combination of the following Earth Science field courses to total 3 units: (Field courses include ESCI 26,27,32,33,34,35,36,37,38,42,43,44,45 \& 46)

Any two 30 -series ESCI courses OR
Any three 40 -series ESCI courses, $\mathbf{O R}$
ESCI 26 or 27 and one 40 -series ESCI course.
Select the remaining transferable units from the following list to include at least one additional science course:

Geology Courses:
ESCI 3, 4, 7, 9, 10, 11, 23
Courses from supporting disciplines:
AGNR 1,60,83
CHEM 1B
CIS $\quad 1$
GIS $\quad 1,10,22$
MATH 3B, 14
NHIS 15
PHYS 2B

## University Studies: Humanities - 18 units

These courses emphasize the study of cultural, literary, humanistic activities and artistic expression of human beings. With careful planning, the Humanities emphasis will satisfy the lower division major courses to transfer to a university and earn a Bachelor's degree in the various fields of Humanities.

Select 18 transferable units from at least 3 of the following disciplines:
ART $1,2,3,4,6,12,21 \mathrm{~A}$
ENGL $\quad 1 \mathrm{~B}, 10 \mathrm{AB}, 11 \mathrm{AB}, 12,13 \mathrm{AB}, 14,15,16,17,18,19,20,24,25$,
31, 33, 36, 91
Foreign Lang. (French, German, Japanese, Russian, Sign Lang., Spanish)
HUM 2, 4, 70
MUS 1,2,3,4,5,10, 11
PHIL $\quad 6,7,8,10$
THTR $\quad 1,5,8,9,12,13,30,31,33,34,37$
CMST 30
DAN (up to 3 units of Dance may apply to the emphasis)

## University Studies: Language Arts - 18 units

With careful planning, the Language Arts emphasis will satisfy the lower division major courses to transfer to a university and earn a Bachelor's degree in the various fields of Language Arts.
Select 18 transferable units from at least two areas:
CMST
ENGL

Foreign Languages
ASL $\quad 1,1 \mathrm{~L}, 2,2 \mathrm{~L}, 3,4$
FREN 1, 2, 3, 4
GERM 1,2,3,4
JAPN 1, 2, 3, 4, 19, 20
RUSS 1,2,3,4
SPAN $\quad 1,2,3,4,19,20$
JOUR 21,27,29
University Studies: Liberal Studies -Teaching Prep -
34 units
The Liberal Studies emphasis prepares students to transfer as a Liberal Studies major to campuses of the California State University system. This is the bachelor's degree major students select to prepare as an elementary school teacher and earn a multiple subjects credential. See a counselor for this major - many if not all courses satisfy the general educational pattern.

Complete the following:
CMST $60 \quad$ Public Speaking
PHSC 1 and/or Physical Science Survey
ESCI 12 Earth Science Survey
BIOL 10 General Biology
MATH 41A and/or B Concepts of Elementary Math
GEOG 8 World Regional Geography
HUM 2 Exploring the Humanities
HIST $2 \quad$ World Civilization to 1500 C.E.
HIST 17A US History
POLS 2 American Government

| Choose $0-6$ units from: |  |  |
| :--- | :--- | :---: |
| ANTH | 2 |  |
| ECE | 1 |  |
| EDUC | 1 |  |
| EDTE | $51,52,61,62,71,72,73$ |  |
| GEOG | 7 |  |
| HIST | $3,17 B$ |  |

## University Studies: Mathematics - 19 units

The Mathematics emphasis is designed to provide lower division major courses to transfer to a university and pursue a baccalaureate degree in mathematics

Complete the following:

| MATH 3A | Calculus 3A |
| :--- | :--- |
| MATH 3B | Calculus 3B |
| MATH 4A | Calculus 4A |
| MATH 4B | Differential Equations |
| MATH 6 | Linear Algebra |
| MATH 14 | Intro to Statistics |

University Studies: Meteorology/Climatology - 18 units
Many universities offer an Atmospheric Science degree or option and this academic plan is intended to support the transfer student interested in that bachelor's degree Courses in this plan produce a foundation to transfer in such studies as weather and climate challenges that face society now and into the future.

| Complete the following courses: |  |
| :--- | :--- |
| ESCI 14 | Meteorology |
| ESCI 17 | Earth System Science |
| ESCI 18 | Global Climate |

Select the remaining transferable units from the following list to include at least one additional science course:

| Related | Science Courses: |
| :--- | :--- |
| ASTR | 1 |
| CHEM | 1 B |
| ESCI | 10,15 |
| AGNR | 60,61 |
| NHIS | 15 |
| PHYS | $2 B$ |
|  |  |
| Courses from supporting disciplines: |  |
| AGNR | 1,83 |
| CIS | 1 |
| GIS | $1,10,22$ |
| MATH | $3 B, 14$ |

## University Studies: Multicultural Studies - 18 units

This emphasis expands a student's understanding of other cultures and is good preparation for university majors in Multicultural Studies, Ethnic studies, and International relations. With careful planning it could be also be used for students interested in International Business, geography, and secondary teaching. Students in the Multicultural Studies program will be exposed to a diversity of non-western cultures, an increasingly valuable knowledge base in our global society.

| Select 18 units from at least 3 different disciplines: |  |  |
| :--- | :--- | :---: |
| ANTH | $2,14,25$ |  |
| ART | 4 |  |
| CMST | 20 |  |
| ENGL | $10 \mathrm{~A}, 10 \mathrm{~B}, 18,20,24$ |  |
| GEOG | $1 \mathrm{~B}, 5,7,8$ |  |
| HIST | $25,35,36,38$ |  |
| POLS | 20,25 |  |
| PSYC | 20,41 |  |
| SOC | 25 |  |

## University Studies: Natural Sciences - 18 units

The Natural Sciences emphasis is designed to provide lower division major courses to transfer to a university and pursue baccalaureate degrees in life science and physical science areas.

| Select 18 transferable units from the following disciplines: |  |
| :--- | :--- |
| AGAS | 19 |
| AGEH | 33 |
| AGNR | 60,61 |
| AGPS | 20 |
| ANAT | 1 |
| ASTR | 1 |
| BIOL | $1,5,6,10,11,12,14,60$ |
| BOT | 1 |
| CHEM | 1 A, 1B, 2A, 2B, $10,11,70,70 A, 71,71 \mathrm{~A}$ |
| ESCI | $1,2,3,4,5,6,7,8,9,10,11,12,14,15,17,18$ |
| FSS | 25 |
| MICR | 1 |
| NHIS | 15 |
| PHSC | 1 |
| PHY | 1 |
| PHYS | $2 A, 2 B, 4 A, 4 B, 4 C$ |
| ZOOL | 1 |

## University Studies: Oceanography - 22 units

This degree plan identifies courses needed for a student to transfer into any of the marine sciences. The associate degree emphasizes a multidisciplinary approach as a foundation that can then be applied to an Oceanography bachelor's degree or a more specialized bachelor's degree such as Marine Biology or Marine Fisheries.

| Complete the following courses: |  |  |
| :--- | :--- | :---: |
| BIOL 1 | Principles of Biology |  |
| ESCI 1 | Physical Geology |  |
| ESCI 15 | Oceanography |  |
| ESCI 16 | Coastal Oceanographic Field Studies |  |

Select the remaining 8 units from the following transferable courses to include at least one additional science course:

| Related | Science Courses: |
| :--- | :--- |
| AGNR | $60 / 61$ |
| BIOL | 12 |
| CHEM | 1 B |
| ESCI | $10,17,37,38$ |
| NHIS | 15,65 |
| PHYS | $2 B$ |

Courses from supporting disciplines:

| AGNR | 1,83 |
| :--- | :--- |
| CIS | 1 |
| GIS | $1,10,22$ |
| MATH | $3 B, 14$ |

## University Studies: Physical Education - 18 units

The Physical Education emphasis is designed to provide lower division major courses to transfer to a university and pursue baccalaureate degrees in Physical Education - teaching, kinesiology, and pre-physical therapy.

| Select 18 transferable units from at least 3 areas: |  |
| :--- | :--- |
| ANAT | 1 |
| CHEM | $1 \mathrm{~A}, 1 \mathrm{~B}, 2 \mathrm{~A}, 2 \mathrm{~B}$ |
| FSS | 25 |
| HLTH | $1,2,3,10$ |
| MATH | 14 or 2 |
| PE | $4,6,10,11,12,13,14,15,16,17,20,21,22,23,26,27,30$, |
|  | $31,32,35,36,37,51,60,62,69,70,71,72,73,74,75$ |
| PEAT | $2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20$, |
|  | $21,22,23,24,25,26,29,30,31$ |
| PHY | 1 |
| PHYS | $2 \mathrm{~A}, 2 \mathrm{~B}$ |
| PSYC | 1 A |

## University Studies: Physical Sciences - 22 units

The Physical Sciences emphasis is designed to provide students with the lower division major courses to transfer to a university and pursue baccalaureate degrees in chemistry, geology, physics, and related areas. See a counselor for the complete list for your choice of transfer university and major.

## Complete the following:

CHEM 1A and 1B
PHYS 2A $+2 B$; or PHYS $4 A+4 B$
MATH 3A

## University Studies: Quantitative Reasoning - 18 units

The quantitative reasoning emphasis is a flexibly designed option which, with proper counseling, provides transfer coursework toward majors in computer science and math.

## Select a minimum of 18 units from the following mathematics and computer

 science courses:| MATH | $2,3 \mathrm{~A}, 3 \mathrm{~B}, 4 \mathrm{~A}, 4 \mathrm{~B}, 6,8,9,10,13,14$ |
| :--- | :--- |
| CIS | $2,60,61,62,63,72$ |

University Studies: Science Teacher - Earth - 20 units
This degree plan prepares the student to transfer as they prepare for a Single Subject Teaching Credential in Science, Earth Science Concentration. Courses in this plan are designed to develop breadth and to demonstrate multidisciplinary aspects across the Earth Sciences.

Complete the following courses:
ESCI 1 Physical Geology
ESCI 2 or 6 Historical Geology or Ancient Life
Select the remaining 12 units from the following list to include at least six units from science courses:

| Science courses: |  |  |
| :--- | :--- | :---: |
| AGNR | $60 / 61$ |  |
| ASTR | 1 |  |
| CHEM | 1 B |  |
| ESCI | $7,9,10,14,15,17,18,32,33,34,35,36,37,38,42,43,44$, |  |
|  | 45,46 |  |
| NHIS | 15,65 |  |
| PHYS | $2 B$ |  |

Courses from supporting disciplines:

| AGNR | 1,83 |
| :--- | :--- |
| CIS | 1 |
| GIS | $1,10,22$ |
| MATH | $3 B, 14$ |

## University Studies: Social Sciences - 21 units

The A.A. in University Studies, Social Sciences emphasis is designed to provide students with a strong foundation for the study of humanity from diverse perspectives. It is an excellent starting point for students interested in pursuing baccalaureate degrees in anthropology, history, political science, psychology, sociology.

Select 9 units from 3 different disciplines:

| ANTH | 2 |
| :--- | :--- |
| ECON | $1 \mathrm{~A}, 1 \mathrm{~B}$ |
| MATH | 14 |
| POLS | 1 or 25 |
| PSYC | 1 A |
| SOC | 1 |
|  |  |
| Select the remaining 12 units from the following list: |  |
| ANTH | $1,2,14,25$ |
| ARCH | 3,4 |
| ECE | $1,2,9$ |
| ECON | $1 \mathrm{~A}, 1 \mathrm{~B}$ |
| FSS | 16,18 |
| GEOG | $1 \mathrm{~A}, 1 \mathrm{AL}, 1 \mathrm{~B}, 5,7,8$ |
| HIST | $1 \mathrm{~A}, 1 \mathrm{~B}, 2,3,17 \mathrm{~A}, 17 \mathrm{~B}, 25,35,36,38,40,55,57$ |
| MATH | 14 |
| POLS | $1,2,20,25$ |
| PSYC | $1 \mathrm{~A}, 5,15,16,17,20,25,41,46$ |
| SOC | $1,2,15,22,25$ |

## University Studies: World Languages - 18 units

The World Languages emphasis is recommended for students pursuing intermediate fluency in a world language to facilitate communication in professional settings or to begin the first two years of a language or literature major and transfer to a university.

Select 13 units (or through level 4) of a foreign language:

| ASL | $1,2,3,4$ |
| :--- | :--- |
| FREN | $1,2,3,4$ |
| GERM | $1,2,3,4$ |
| JAPN | $1,2,3,4$ |
| RUSS | $1,2,3,4$ |
| SPAN | $1,2,3,4$ |

Select the remaining $0-5$ units from:

| ASL | $1,1 \mathrm{~L}, 2,2 \mathrm{~L}, 3,4$ |
| :--- | :--- |
| ENGL | $10 \mathrm{AB}, 25$ |
| FREN | $1,2,3,4$ |
| GERM | $1,2,3,4$ |
| JAPN | $1,2,3,4,19,20$ |
| RUSS | $1,2,3,4$ |
| SPAN | $1,2,3,4,19,20$ |

## Associate of Science General Studies

The Associate of Science degree, General Studies, is for students desiring a two year degree to prepare to enter the workforce or continue in their current career. The choice of emphasis allows the student to explore an area of interest while providing sufficient depth in a field of knowledge to contribute to lifelong interest.

Complete the Shasta College GE pattern, one Emphasis from below, and AS degree-applicable electives (\#1-199) to total 60 units. All courses in the area of emphasis must be completed with a C or better.

## Areas of Emphasis

## General Studies: Agriculture Trades - $\mathbf{1 8}$ units

The Agriculture emphasis allows students to explore all areas of agriculture, including animal science, agriculture business, horticulture, horse practices, sustainable or holistic agriculture, mechanical equipment, natural resources, veterinary practices, and viticulture.

| Select 18 units from at least three of the following areas: |  |
| :--- | :--- |
| AG | $1,6,9,58$ |
| AGAS | $10,11,15,19,30$ |
| AGAB | $51,53,54$ |
| AGEH | $22,23,26,27,28,29,31,31.1,31.2,31.3,33,34,35,36,37,38$, |
|  | $39,40,41,44,45,46,60,71,72,75,122,125,130$ |
| AGEQ | $12,13,14,21,109,110,111,112,113,114,115$ |
| AGMA | 42,44 |
| AGNR | $1,4,6,10,11,12,50,51,52,53,55,60,61,64,65,66,69,70$, |
|  | $83,173,174,176$ |
| AGPS | $20,24,25,126$ |
| AGSA | 50,56 |
| AGVETT | $1,2,3,4,5,6,7,16$ |
| AGVIT | 80,81 |

## General Studies: Business - Basic Business - 18 units

The Basic Business emphasis allows students to explore many areas of business, including accounting, business law, management, marketing, real estate, and specialized areas such as hospitality, and casino management.

```
Choose 3 units from the following:
ACCT
    2, 101,194
Choose 9-15 units from the following:
BUAD 6, 8, 10, 12, 15,40, 41,42, 44, 45,46,47,48,49,50, 51, 52,
    53,54,66,71,72,73, 80, 91, 92, 106, 120
OAS
39
```

Choose 0-6 units from the following:

| BUAD | $76,77,176$ |
| :--- | :--- |
| CIS | 1 |
| DSS | 10,63 |
| HOSP | $10,20,35,40,45,50,60,65$ |
| MKTG | 72,76 |
| REAL | 30 |
| ECON | $1 A, 1 B$ |

## General Studies: Climatological and Meteorological

Studies - 18 units
Many natural processes studied across a broad spectrum of scientific disciplines influence climate and weather on Earth. This degree plan reflects that fact by incorporating multidisciplinary courses such as Earth System Science and Oceanography while being centered on a core of physics, meteorology, and global climate. Electives in the plan can support spatial associations, environmental considerations, geologic and astronomical influences, as well as computer basics and statistics, depending on student interests. At least one chemistry and one physics course are recommended for the degree, as well as the completion of MATH 102 for the GE pattern.

Complete the following Earth Science courses:
ESCI 14 Meteorology
ESCI 17 Earth System Sciences
ESCI 18 Global climate: Past, Present and Future
Select one of the following science courses to total 4 units:

| AGNR | 60 and 61 |
| :--- | :--- |
| ESCI | 10,15 |

PHYS 2B
Select any of the following courses to total 4 units:
ASTR 1
CIS $\quad 1$

GIS $\quad 1,10,22$
MATH 14
AGNR 1,83

General Studies: Coastal Oceanographic Studies - 20 units This degree is designed to focus the student's studies on coastal marine environments. The plan includes core and supporting classes that provide the background necessary to apply basic scientific principles in support of field- and labbased coastal research including data collection and analysis, various scientific methodologies in the field and in the lab, relevant modern scientific theory, and scientific problem solving. At least one chemistry and one physics course are recommended for the degree, as well as the completion of MATH 102 for the GE pattern.

Complete the following Earth Science courses:

| ESCI 1 | Physical Geology |
| :--- | :--- |
| ESCI 15 | Oceanography |
| ESCI 16 | Coastal Oceanographic Field Studies |

Select one course from each of the following science course listings to total 7 units:

Choose one 3-unit course:
BIOL 12
ESCI 10,17
Choose one 4- unit course:
AGNR 60 and 61
BIOL $\quad 1$ (recommended), 10
PHYS 2B
Select any of the following courses to total 3 units:
AGNR 1,83
CIS 1

GIS 1,10, 22
MATH 14
NHIS 15
General Studies: EMS - Emergency Medical Response 18 Units
This degree is directed at students who will be working as Emergency Medical Technicians. Additionally, this degree could be used as a general preparation program for those students who will be attending a Paramedic certification program.
Complete the following:
FAID 175

| And select 13 units from the list below: |  |  |
| :--- | :--- | :---: |
| ANAT | 1 |  |
| BIOL | 5,6 |  |
| FAID | $132,133,134$ |  |
| FIRS | 104,120 |  |
| FSS | 25 |  |
| MICR | 1 |  |
| PHY | 1 |  |

## General Studies: Fire - Fire Investigation - 18 Units

While available to anyone, this degree is designed for students who intend on working as fire investigators. Additionally, this degree is applicable for students who are, or will be working in Fire Prevention, Plans Checking, or similar functions within a municipal fire department. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in Chemistry, Physics, Engineering, Systems Analysis, or similar disciplines.

Complete the following:
FIRS 71, 86, 189
Select 10 units from the list below:
ADJU 16, 20

CHEM 2A
FIRS 191, 192
FTWL 101
FTWP 114
PHYS 2A

## General Studies: Fire - Fire Service Command, Company <br> Officer - 18 Units

While available to anyone, this degree is designed for students who have been working as Firefighter/Engineers (paid or volunteer) and intend on becoming Engine Captains. Additionally, this degree supports wildland firefighters who are, or will be working at the Crew/Engine/Dozer/Squad Boss levels, or similar supervisory positions. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in team development, group dynamics/psychology, fire administration or similar disciplines.

## Complete the following:

FIRS
85, 87
And select 14 units from the list below:
$\begin{array}{ll}\text { FIRS } & 100,108,123,124,135,136,179 \\ \text { FTWO } & 114,116,121,135\end{array}$
FTWL
102, 103
General Studies: Fire - Fire Service Leadership - 18 Units While available to anyone, this degree is designed for students who have been working as Firefighter/Engineers (paid or volunteer) and intend on promoting to supervisory positions. Additionally, this degree supports wildland firefighters who are or will be working at the Crew/Engine/Dozer Boss, Squad Boss, or similar supervisory positions. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in management, leadership, organizational dynamics, industrial psychology, cognitive engineering or similar disciplines.

## Complete the following:

FIRS
180
And select 15.5 units from the list below:
ADJU 42
CMST maximum of 3 units
FIRS 113
FTWO 115, 134
PHIL maximum of 3 units

## PSYC <br> 14

NOTE: Student may use a maximum of 3 units from the BUAD courses that are listed below to satisfy the 12.5 units.
BUAD $\quad 45,81,82,83,84,85,86,87,88,89,90$
General Studies: Fire - Fire/Rescue Technologies - 18 Units While available to anyone, this degree is designed for students who have been working as Firefighters (paid or volunteer) and intend on transferring or upgrading to a Technical Rescue or Urban Search and Rescue Team. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with the final target being undergraduate and graduate degrees in Materials Science, Engineering, Health and Safety, Physics, or similar disciplines.

Complete the following:
FIRS
79, 86
And select 12 units from the list below:
FIRS $145,146,147,148,149$
FTWL 101, 102, 103
Courses that will also be accepted from other accredited colleges:
Rescue Systems 2
Confined Space Rescue Operations
Trench Rescue
Low Angle Rescue Operational
General Studies: Fire - Wildland Fire Behavior - 18 Units
While available to anyone, this degree is designed for students who have been working as wildland firefighters and intend on working within the Plans Section of the Incident Command System (specifically the Situation Unit and Fire Behavior positions). Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in Meteorology, Physics, or similar disciplines.

## Complete the following:

$\begin{array}{ll}\text { ESCI } & 14 \\ \text { FTWO } & 113,132,144\end{array}$

| Select 9.5 units from the list below: |  |
| :--- | :--- |
| CHEM | maximum of 3 units |
| FTWL | 101,103 |
| FTWO | $152,157,162$ |
| FTWP | $110,123,126$ |
| MATH | maximum of 3 units at or above the MATH 102 level |
| PHYS | maximum of 3 units |

## maximum of 3 units

101, 103
FTWP - 110, 123, 162
MATH maximum of 3 units at or above the MATH 102 level
PHYS maximum of 3 units

General Studies: Fire - Wildland Fire Reconnaissance 18 Units
While available to anyone, this degree is designed for students who have been working as wildland firefighters and intend on working within the Plans Section of the Incident Command System (specifically the Situation Unit and Field Observer positions). Additionally, this degree is applicable to students who are working within the Incident Command System as Division Supervisors, Strike Team Leaders, Line Scouts, Lookouts or Squad Bosses. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in Geographical Information Systems, Geography, Cartography, or similar disciplines.

| Select 18 units from the list below: |  |  |
| :--- | :--- | :---: |
| BOT | 1 |  |
| ESCI | 14 |  |
| FIRS | 156 |  |
| FTWL | 110 |  |
| FTWO | $112,128,132$ |  |
| GEOG | 11 |  |
| GIS | 1,22 |  |


\section*{General Studies: Food and Beverage and Lodging <br> Management - 18 units <br> The Food and Beverage and Lodging management emphasis allows students to explore many areas of the hospitality industry, including culinary arts, restaurant management, casino management, and beverage management. <br> | CULA | $\begin{aligned} & 45,46,48,49,50,55,59,60,65,66,73,74,75,76,78,80,82 \\ & 88,159,161,172 \end{aligned}$ |
| :---: | :---: |
| DSS | 10, 63 |
| HOSP | 10, 20, 35, 40, 45, 50, 60, 65 |

Select the remaining $0-6$ units from the following:

| ACCT | $2,4,101,102,103,104,194$ |
| :--- | :--- |
| BUAD | $6,8,10,40,42,66,71,72,73,80,81-90,91,106,120,166$ |
| CIS | $1,83,86$ |
| OAS | $10,11,12$ |

## General Studies: Geologic Field Studies - 20 units

This degree plan places a field emphasis around classes that provide the background necessary to apply basic scientific principles centered on the geological sciences. Classes support modern geologic theory and its application to field problems as well as lab experiences that produce a foundation for successful fieldwork. At least one chemistry and one physics course are recommended for the degree, as well as the completion of MATH 102 for the GE pattern.
Complete the following Earth Science courses:
ESCI 1 Physical Geology
ESCI 23 Introduction to Geology in the Field
And one geology course with a historical component: ESCI 2, 6, 7, or 10
Select one of the following Earth Science courses:
ESCI 9 Geologic Hazards
ESCI 11 Economic Geology
Select one combination of the following Earth Science field courses to total 4 units: Field courses include ESCI $26,27,32,33,34,35,36,37,38,42,43,44,45,46$
Any two 30 -series in ESCl courses and any one 40 series ESCI course OR ESCI 26 or 27 and any two 40 -series ESCI courses

| Select any of the following courses to total 3 units: |  |  |  |
| :--- | :--- | :---: | :---: |
| AGNR | 1,83 |  |  |
| CIS | 1 |  |  |
| GIS | $1,10,22$ |  |  |
| MATH | 14 |  |  |
| NHIS | 15 |  |  |

## General Studies: Health - 18 units

The Health emphasis allows students to explore health-related topics such as nutrition, physical fitness, substance abuse, wellness, and medical-related areas in medical terminology, first aid, EMT training. Students who have completed LVN and CNA certificate programs can use this emphasis to complete an associate degree.

```
Select }18\mathrm{ units from at least two areas*
DAN (activity)* 10,15,20,21,30,31,40,41,50
FAID 130,132,133,134,175,178
FSS 25
HLTH 1, 2, 3,10
HEOC 10,100,160,180,181,192,196
OAS 110,111
PE 4,6,10,35,36
PE (activity)* 11,12,13,14,15,16,17,20,21,22,23,26,27,30,31,32, 37,
PEAT 2,4,31
```

(General Studies: Health requirements continued on next page)
(General Studies: Health requirements continued):
PEAT (activity)* $3,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22$, 23, 24, 25, 26, 29, 30,
VOCN 160, 161, 162
*Limit of 6 units from Dance, Physical Education activity, and Athletics courses combined.

## General Studies: Human Development - 18 units

The Human Development emphasis permits students to explore the areas of early childhood education, teacher preparation, and family studies in order to develop foundational concepts and skills in working with people of all ages. Students will recognize that each human life, characterized by multiple influences and interrelated domains, is worthy of study, both individually and within a variety of contexts.

Select 18 units from at least two of the following areas:
ECE $\quad 1,2,3,4,6,7,8,9,10,12,14,15,16,17,20,22,24,26,27$, $28,30,40,50,51,52$
EDUC
1, 2, 10
EDTE $\quad 51,52,61,62,71,72,73$
FSS $\quad 10,12,16,18,25,26,27,46,60$

## General Studies: Humanities - $\mathbf{1 8}$ units

The Humanities emphasis permits students to explore the arts, ideas, values, and cultural expressions of the world's peoples as a foundation for lifelong learning or as an introduction to fine arts, literature, music, theater, communication, journalism, and world languages.

Select 18 units from at least three of the following areas (with no more than 9 units of foreign language):

| ART | $1,2,3,4,6,12,13,15,16,17,21 \mathrm{~A}, 21 \mathrm{~B}, 23,26,27,29,30,31$ $32,35,36,45,46,50,55,56,57,60$ A, 61, 62, 80A, 80B, 110, 121, 122, 123, 124, 125, 126 |
| :---: | :---: |
| ASL | 1, 1L, 2 2L, 3, 4 |
| CMST | 10, 20, 30, 40, 54, 60 |
| DAN | (Up to 3 units of Dance courses may apply) |
| ENGL | $\begin{aligned} & 1 \mathrm{~B}, 1 \mathrm{C}, 10 \mathrm{AB}, 11 \mathrm{AB}, 12,13 \mathrm{AB}, 14,15,16,17,18,19,20,24 \text {, } \\ & 25,31,33,36,91 \end{aligned}$ |
| FREN | 1, 2, 3, 4 |
| GERM | 1, 2, 3, 4 |
| HUM | 2, 4, 70 |
| JAPN | 1, 2, 3, 4, 19, 20 |
| JOUR | 21, 24, 27, 29 |
| MUS | $\begin{aligned} & 1,2,3,4,5,10,11,14,21,22,23,25,29,30,31,33,35,40 \text {, } \\ & 41,42,43,44,46,47 \end{aligned}$ |
| PHIL | 6, 7, 8, 10 |
| RUSS | 1, 2, 3, 4 |
| SPAN | 1, 2, 3, 4, 19, 20, 151 |
| THTR | $1,5,8,9,12,13,20,21,23,24,25,26,29,30,31,33,34,37$, $41,42,50,51,52,60,61,70,74,81,153$ |

## General Studies: Industrial Technologies - 18 units

The Industrial Technology emphasis permits the student to explore the trades and acquire skills in a variety of technical fields: automotive and diesel technology, construction, computerized drafting, computer electronics, heavy equipment operation, aviation ground school, machine tooling, and welding.

Select 18 units from at least three of the following areas:

| Select 18 units from at least three of the following areas: |  |
| :--- | :--- |
| AGMA | 42,44 |
| AUTO | $1,10,20,21,130,131,147,161,162,163,164,170,172$ |
| CONS | $45,46,47,48,52,53,5455,56,71,72,73,74,84,148,149$, |
|  | $150,160,161,168,178$ |
| DIES | $30,48,49,158,160,161,162,164,166,170$ |
| ENGR | 1 A, 1B, $2,20,21,22,24,25,26,27,29,30,31,32,33,37,38$, |
|  | $64,118,119,120$ |
| INDE | $1,101,138,150,152,161,162,163,180,181$ |
| WELD | $56,70,73,130,170,171,172,174,175176,178,182,184$, |
|  | 186,188 |

## General Studies: Language Arts - 18 units

The emphasis in language arts allows students to explore the areas of both written and spoken English language, literature, and world languages.

| Select 18 units from at least two areas: |  |
| :---: | :---: |
| CMST | 10, 20, 30, 40, 54, 60 |
| ENGL | 1B, 1C, 10AB, $11 \mathrm{AB}, 12,13 \mathrm{AB}, 14,15,16,17,18,19,20,24$, 25, 31, 33, 36, 91 |
| JOUR | 21, 27,29 |
| Foreign Languages |  |
| ASL | 1, 1L, 2 2L, 3, 4 |
| FREN | 1, 2, 3, 4 |
| GERM | 1, 2, 3, 4 |
| JAPN | 1, 2, 3, 4, 19, 20 |
| RUSS | 1, 2, 3, 4 |
| SPAN | 1, 2, 3, 4, 19, 20, |

## General Studies: Natural Sciences - 18 units

This emphasis allows the student to explore the broad areas of life and physical sciences as a foundation for lifelong learning.

Select 18 units from at least four of the following areas:
Agriculture:

| AGAS | 19 |
| :---: | :---: |
| AGEH | 33 |
| AGNR | 60 |
| AGPS | 20 |
| NAT | 1 |
| STR | 1 |
| IOL | 1,5,6,10,11,12,14,15,30 |
| OT | 1,50, 52 |
| HEM | $1 \mathrm{~A}, 1 \mathrm{~B}, 2 \mathrm{~A}, 2 \mathrm{~B}, 6,10,11,16,26,70,70 \mathrm{~A}, 71,71 \mathrm{~A}$, |
| SCI | $1,2,3,4,5,6,7,8,9,10,11,12,14,15,16,17,18,23,26,27$, $32,33,34,35,36,37,38,42,43,44,45,46$ |
| SS | 25 |
| GEOG | 1A, 1AL |
| IS | 1, 10, 20, 21, 22, 23, 24, 25 |
| MICR | 1 |
| HIS | 15,65, 105 |
| PHSC | 1 |
| HY | 1 |
| HYS | 2A, 2B, 4A, 4B, 4C |
| OOL | 1,15, 63 |

## General Studies: Office and Computer Technologies -

## 18 units

The office and computer technologies emphasis allows students to explore many areas of office management, and computer and information management, including clerical skills, legal assisting, medical coding and billing, medical transcription, Computer Networking, A+, and Web design.

Select $12-18$ units from the following areas:
CIS $\quad 1,2,3,4,6,20,21,22,23,31,32,33,34,35,36,37,38,39$,
$50,51,52,53,54,55,57,60,61,62,63,64,70,71,72,73,74$, 75, 79, 81, 83, 86, 90,92
OAS $\quad 10,11,12,30,51,52,53,63,64,80,84,91,92,93,94,112$, $113,114,150,152,157,158,160,166,171$

| Select $0-6$ additional units: |  |
| :--- | :--- |
| ACCT | $101,102,103,104$ |
| BUAD | $10,45,66,71,72,73$ |
| OAS | 39 |

## General Studies: Public Safety and Services - 18 units

This emphasis permits the student to explore courses in the field of public safety and for current law enforcement personnel to earn an associate degree for advancement in the field.

Complete the following course:
ADJU 10 Introduction to Administration of Justice OR
ADJU 131 Regular Basic Course Modular Format Level III Academy
Select the remaining 13-15 units from the following:
ADJU $\quad 10,11,15,16,17,18,20,21,22,23,24,25,26,30,40,41,42$, $100,102,103,106,131,132$

## General Studies: Social Sciences - $\mathbf{1 8}$ units

This emphasis allows students to explore the social and behavioral sciences as a foundation for lifelong learning, or as introduction to the related fields of anthropology, psychology, sociology, economics, geography, history, and political science.

| Select 18 units from at least three of the following areas: |  |
| :--- | :--- |
| ANTH | $1,2,5,14,25$ |
| ARCH | $3,4,5$ |
| ECE | $1,2,9$ |
| ECON | 1 A, 1 B |
| FSS | 16,18 |
| GEOG | $1 \mathrm{~A}, 1 \mathrm{AL}, 1 \mathrm{~B}, 2 \mathrm{~A}, 2 \mathrm{~B}, 5,7,8,11$ |
| HIST | $1 \mathrm{~A}, 1 \mathrm{~B}, 2,3,17 \mathrm{~A}, 17 \mathrm{~B}, 25,35,36,38,40,55,57$ |
| POLS | $1,2,20,25$ |
| PSYC | 1 A, $5,14,15,16,17,20,41,46$ |
| SOC | $1,2,15,22,25,70$ |

## AA-T and AS-T Degrees (Transfer)

Upon completion of these degrees, students will be offered priority consideration for admission at junior standing to the California State University system in a similar program with some restrictions (see page 5-1). Once enrolled at a CSU, students in the program will be able to complete a Bachelor of Arts or Science degree in no more than 60 additional units. Please see your counselor for complete requirements and for a list of participating universities.

## Business Administration

## Associate in Science for Transfer:

PROGRAM DESCRIPTION: The Associate in Science in Business Administration for Transfer degree is designed to provide students with the common core of lower division courses required to transfer and pursue a baccalaureate degree in Business Administration. This includes business degrees with options such as accounting, finance, human resources management, international business, management, operations management, and marketing. The Associate in Science in Business Administration for Transfer degree aligns with the CSU Bachelor of Science in Business Administration.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
2. Identify and illustrate fundamental accounting concepts, classifications, cost systems, cost-volume-profit relationships, budgeting and profit planning to support planning, control and decision making activities of management.
3. Prepare and process payroll records and payroll tax returns in compliance with applicable federal and state laws and regulations.
4. Apply the Internal Revenue Code and related Treasury Regulations as they relate to individual, partnership and corporation income taxes; prepare simple individual income tax returns.
5. Utilize their ability to identify and apply business and finance concepts to advance into upper division coursework as business majors in the fields of accounting, finance, marketing, management and information technology and services.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## REQUIREMENTS:

In addition to the 34-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Business Administration for Transfer degree Students must also obtain a minimum grade point average of 2.0 and a $C$ or better in each major course.

## REQUIRED CORE

ACCT 2 Introduction to Financial Accounting 3
ACCT $4 \quad$ Introduction to Managerial Accounting
BUAD 6 Business Law
ECON 1A*\# Principles of Economics (Micro)
ECON 1B*\# Principles of Economics (Macro)
LIST A: (select one)
MATH 8*\# Finite Mathematics (3)
MATH 9*\# Survey of Calculus (4)
MATH 14*\# Introduction to Statistics (4)
LIST B: (select two)
Any List A course not used above
BUAD 10 Introduction to Business (3)
or BUAD 66 Business Communications (3)
CIS $1 \quad$ Computer Literacy Workshop (3)
*May be used to fulfill CSU General Education requirements. See a counselor. \#May be used to fulfill IGETC requirements. See a counselor.

| ASSOCIATE IN SC | ON F |
| :---: | :---: |
| TRANSFER DEGREE REQUIREMENTS: |  |
| Major | 24-27 |
| General Education | 34-39 |
| General Electives | 0-2* |
| Degree Total | 60 |

‘Number will vary depending on units that double count.

## Communication Studies

## Associate in Arts for Transfer:

PROGRAM DESCRIPTION: Communication classes provide students with skills that are essential for other classes and programs at Shasta College and beyond. The Associate in Arts in Communication Studies for Transfer program teaches communication theory and competencies that are crucial for success in both persona and business relationships. Students learn analytical and critical thinking skills that are essential life skills. Good oral communication skills have been documented by research to be an important factor in the health of personal relationships, and these skills have even been linked to one's physical and psychological health Communication courses enable students to lead richer, more satisfying and productive lives by improving their grasp of core theories and practical skills. The results are often immediate and dramatic, improving both personal and professional relationships in both large and small groups. The Associate in Arts in Communication Studies for Transfer degree aligns with the CSU Bachelor of Arts in Communication Studies
This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Identify the role communication plays in academic, social and professional endeavors.
2. Present well-designed, well-researched, well-developed and supported information and persuasive presentations.
3. Demonstrate the tools of advocacy for issues of justice and fairness, with integrity and civility.
4. Demonstrate the skills of critical thinking, recognize common fallacies of thought, demonstrate active listening, conflict management and wi-win problem solving essential for both personal relationships and team work.
5. Identify crucial issues affecting intercultural communication, and the adaptations necessary for successful interactions between cultures.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## REQUIREMENTS:

In addition to the 34-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Communication Studies for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a $C$ or better in each major course.
REQUIRED CORE:
CMST 60*\# Public Speaking
LIST A (Choose six units from the following):
CMST 10*\# Interpersonal Communication (3 units)
CMST 40* Argumentation and Debate (3 units)
CMST 54*\# Small Group Communication (3 units)
LIST B (Choose six units from the following):
Any List A course not used above
CMST 20* Intercultural Communication (3 units)
CMST 30* Oral Interpretation (3 units)
CMST $75 \quad$ Forensics Workshop (3 units)
LIST C (Choose three units from the following):
Any List A or List B course not used above
ANTH 2*\# Cultural Anthropology (3 units)
JOUR 21* Introduction to Mass Communications (3 units)
PSYC 1A*\# General Psychology (3 units)
SOC 1*\# Introduction to Sociology (3 units)
*May be used to fulfill CSU General Education requirements. See a counselor \#May be used to fulfill IGETC requirements. See a counselor.
ASSOCIATE IN ARTS IN COMMUNICATION STUDIES FOR
TRANSFER DEGREE REQUIREMENTS:

| Major | 18 |
| :--- | ---: |
| General Education | $34-39$ |
| General Electives | $\frac{3-8^{*}}{60}$ |
| Degree Total |  |
| Number will vary depending on units that double count. |  |

## Early Childhood Education

## Associate in Science for Transfer:

PROGRAM DESCRIPTION: The Associate of Science Early Childhood Education Transfer degree is designed to provide students with a common core of eight early childhood education courses (approved by the Curriculum Alignment Project) that permit students to transfer smoothly to participating CSU's to complete a Bachelor's degree in child development or early childhood education.

The degree is designed to facilitate students' successful transfer to certain California State University (CSU) campuses that prepare them for advanced study in a variety of graduate programs, as well as a variety of careers such as teaching, Child Development Specialist, Program Directors, and Child Life Specialists. With a BA in ECE/Child Development, students are eligible for the Master Teacher and Site Supervisor levels of the CA Child Development Permit, using the Alternative Qualifications category.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Exhibit skill in identifying the needs, the characteristics and multiple influences on the development of children birth to age eight.
2. Design, execute and evaluate environments and activities that support positive developmental play and learning outcomes for young children.
3. Establish and maintain safe and healthy learning environments for young children.
4. Observe, document, and use authentic assessment tools as a vehicle for child and program assessment and curriculum design.
5. Utilize ethical standards and professional behaviors that deepen understanding, knowledge, and commitment regarding the ECE profession.
6. Build family and community relationships and understand and value the importance and complex characteristics of families and communities in young children's development.
7. Evaluate developmentally effective approaches to create positive relationships and supportive interactions as the foundation in working with children and families from diverse societies.
8. Upon completion of a program of study in Early Childhood Education students will, through planned and sequenced field experiences, develop the knowledge, skills and professional dispositions necessary to promote the development and learning of young children across the entire developmental period of early childhood in multiple early childhood age groups and in the variety of settings that offer early care and education.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## REQUIREMENTS:

In addition to the 34-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Early Childhood Education for Transfer degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.
REQUIRED CORE:
ECE 2* Child, Family, Community 3
ECE $7 \quad$ Early Childhood Observation and Assessment 3
ECE $8 \quad$ Teaching Practicum for Young Children 5
ECE 9*\# Child, Growth and Development
ECE 15 Child, Health, Safety and Nutrition
ECE 17 Principles/Practices of Teaching Young Children
ECE 20
ECE 28
Teaching in a Diverse Society
*May be used to fulfill CSU General Education requirements. See a counselor. \#May be used to fulfill IGETC requirements. See a counselor.

| ASSOCIATE IN SCIENCE IN EARLY CHILDHOOD EDUCATION FOR |  |
| :--- | :---: |
| TRANSFER DEGREE REQUIREMENTS: |  |
| Major | 26 |
| General Education | $34-39$ |
| General Electives | $\underline{0^{*}}$ |
| Degree Total | $\mathbf{6 0}$ |

## Sociology

## Associate in Arts for Transfer:

PROGRAM DESCRIPTION: Sociology is the systematic and scientific study of society and social behavior. The sociologist looks beyond individual and unique events to the predictable broad patterns and regular occurrences of social life that influence individuals. Studies range from the profound impact of post-industrial societies on family life, crime, mass communications, gender, race, ethnicity and intergenerational relations to the study of emotions and the values that govern daily social encounters.

The sociology major is designed to provide undergraduate preparation leading to careers in social work, politics, law, public administration, the nonprofit sector, international development, marketing, urban and environmental planning, public relations, personnel, criminal justice, counseling and other social service professions. The Associate in Arts in Sociology for Transfer degree will also prepare a student for advanced studies in several areas, including sociology, social work, environmental studies, education, public health and urban planning. This degree prepares students for a CSU Baccalaureate Degree in Sociology.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Articulate the sociological perspective on human behavior.
2. Compare and contrast the major theoretical orientations in sociology.
3. Articulate the role of theory and social research methods in sociology.
4. Describe research methodology and critically evaluate sociological data.
5. Integrate content knowledge and cognitive skills, i.e., logical thinking, problemsolving, and critical reasoning, when completing exams, term papers, and additional class assignments.
6. Apply sociological principles that contribute to the foundation for life-long personal growth, development of effective interpersonal and social skills, education, employment and everyday life.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## REQUIREMENTS:

In addition to the 34-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Communication Studies for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

REQUIRED CORE:
SOC 1*\# Introduction to Sociology 3
LIST A
SOC 2*\# Social Problems 3
MATH 14*\# Introduction to Statistics
LIST B (Choose six units from the following):
PSYC $15 \quad$ Social Psychology (3 units)
SOC $25^{*} \# \quad$ Sociology of Minorities (3 units)
SOC 30*\# Sociology of Gender (3 units)
LIST C (Choose three units from the following):
Any List A or List B course not used above
ANTH 2*\# Cultural Anthropology (3 units)
GEOG 1B*\# Cultural Geography (3 units)
PSYC 1A*\# General Psychology (3 units)
SOC 15*\# Sociology of Mass Media (3 units)
SOC 22*\# Sociology of Aging (3 units)
SOC 70* Social Welfare (3 units)
*May be used to fulfill CSU General Education requirements. See a counselor. \#May be used to fulfill IGETC requirements. See a counselor.

| ASSOCIATE IN SCIENCE IN SOCIOLOGY FOR |  |
| :--- | :--- | ---: |
| Major |  |
| General Education | 19 |
| General Electives | $34-39$ |
| Degree Total | $\frac{2-7^{*}}{\mathbf{6 0}}$ |

*Number will vary depending on units that double count.

## Degrees and Certificates

More information on associate degree requirements starts on page 5-1.
NOTE: Check with your counselor and/or division office regarding sequence of course offerings for degrees and certificates.

## Accounting Clerk/Bookkeeper

## Certificate:

PROGRAM DESCRIPTION: Completion of the Certificate Program will prepare the student for entry-level position in accounts receivable, accounts payable, payroll, and general ledger.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
2. Use integrated accounting software in performing the processes of the accounting cycle and preparing the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
3. Prepare and process payroll records and payroll tax returns in compliance with applicable federal and state laws and regulations.
4. Demonstrate the use of skills relevant for problem solving, decision making and solving ethical dilemmas in the business environment including critical thinking, effective written and oral communication, working effectively in teams and the proficient use of computers for information search, retrieval, problem solving and communication.
5. Identify and explain the current economic indicators regarding inflation, unemployment, monetary and fiscal policy and their effects on consumers and small businesses.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/acct/gainful employment/.

| CERTIFICATE REQUIREMENTS: |  |  |
| :--- | :--- | :--- |
| ACCT 101 | Basic Accounting I |  |
| ACCT 102- | Basic Accounting II | 3 |
| ACCT 103 | PC Accounting | 3 |
| ACCT 104 | Payroll Accounting | 2 |
| BUAD 10 | Introduction to Business | 2 |
| BUAD 66 | Business Communications | 3 |
| BUAD 106 | Business Math | 3 |
| BUAD 166 | Business English | 3 |
| OAS 10 | Excel for Windows-I | 3 |
| OAS 51 | Introduction to Keyboarding and Word | 1 |
| OAS 64 | Computerized Ten-Key | 3 |
| OAS 166 | Records Management | .5 |
|  |  | 2 |
|  | TOTAL UNITS FOR CERTIFICATE | $\mathbf{2 8 . 5}$ |

-Student may take ACCT 2 in place of ACCT 101 or ACCT 102

## Administration of Justice

## Associate in Science:

PROGRAM DESCRIPTION: The Administration of Justice Program (AOJ) is designed to provide professional courses in AOJ fields for the pre-service student, and for the criminal justice employee preparing for promotional exams or to upgrade or maintain skills and knowledge. At Shasta College, you will receive occupational training for both the entrance and promotional levels of AOJ agencies and allied services. With additional general education courses, you will also be able to fulfill the requirements to transfer to a four-year college with junior standing A variety of agencies exist at the federal, state and local levels of government; and also through private industry.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Demonstrate their knowledge of the evolution of the justice system, its objectives, role and trends through discussion and examinations.
2. Demonstrate their knowledge of the basics of California criminal law and the core principles that drive the police and course, through discussion and examinations.
3. Demonstrate their knowledge of the basics of evidence collection, chain of evidence and submission of evidence and legal requirements for the handling of evidence through discussion and examinations.
4. Demonstrate their knowledge of the California Court Criminal System, law enforcement report writing and court testimony through examination and discussion
5. Demonstrate their knowledge in the basics of criminal investigation and how the process leads to submission to the District Attorney, court system and corrections, through examination and discussion.
6. Demonstrate their knowledge of how policy/community relations intertwine into community relations through examination and discussion.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:
ADJU 10 Introduction to Administration of Justice 3
ADJU 15 Concepts of Criminal Law
ADJU 16 Legal Aspects of Evidence
ADJU 17 Principles and Procedures of the Justice System
ADJU 18 Community Relations
ADJU $20 \quad$ Principles of Investigation
Career Planning for Administr
ADJU $26 \quad$ Courtroom Testimony/Report Writing
RESTRICTED ELECTIVES: (Choose six units) 6
ADJU 11 Traffic Control and Investigation (3)
ADJU $21 \quad$ Police Field Operations (3)
ADJU 22 Juvenile Procedures (3)
ADJU $24 \quad$ Multi-Cultural Issues/Law Enforcement (3)
ADJU 25 Substantive Law (3)
ADJU $30 \quad$ Wildlife Law Enforcement (3)
ADJU $40 \quad$ Institutional and Field Services (3)
ADJU 41 Fundamentals of Crime and Delinquency (3)
ADJU $42 \quad$ Interviewing and Counseling (3)
CIS $1 \quad$ Computer Literacy Workshop (3)
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | :--- |
| Major | 30 |
| Additional General Education | 18 |
| General Electives | 12 |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Agriculture - Agricultural Business

## Associate in Science:

PROGRAM DESCRIPTION: The Agricultural-Business major is designed for students interested in working in the area of agricultural-related business. Career opportunities in agricultural business may include careers with the U.S. Department of Agriculture or Resource Conservation Service or a career in ranch or farm management, banking, agricultural credit, agricultural insurance, consulting firms, or agricultural product distribution and sales. The employment opportunities are many.
"Agri" Business is the largest business sector in the world as statistics show that it takes at least 16 people to keep one farmer in business. These people are involved in all phases of agriculture from the production and marketing of everything from the fertilizer and seed, equipment and machinery to the crops, feed, production loans, and crop insurance and so on. In the state of California, agriculture is the \#1 commodity which further increases our student's employment opportunities. This degree is designed to give students a broad understanding of the agriculture industry, as it is much easier for a student who has solid foundation in agriculture to be successful in the world of agricultural business as "agri" business differs from other business sectors as much of the time the commodities that are marketed and sold are perishable.
This program also prepares students for transfer to an Agriculture Business program at a four-year university. Students who plan to transfer should talk to a counselor or advisor to select appropriate general education and elective courses that will meet the requirements of the chosen university program.
Students planning to transfer to a college or university should consult a counselor or Agriculture faculty regarding transfer requirements. TRANSFER REQUIRE-MENTS MAY BE DIFFERENT FROM A.S. DEGREE REQUIREMENTS. Sixty (60) units are required for the AS Degree. All graduation requirements must be met.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Demonstrate proficiency in accounting procedures using a double-entry bookkeeping system.
2. Organize and prepare reports, presentations, and other information pertaining to managerial procedures.
3. Describe the economic significance of California Agriculture and its relationship to the global economy.
4. Explain supply and demand as it relates to local and regional agriculture business industries.
5. Demonstrate the ability to make logical business decisions based on the analysis of business trends locally, regionally, and globally.
6. Demonstrate proficiency using computers, the Internet, and other technology as they relate to agri-business.
7. Recognize world markets and describe their effect on local agriculture economies

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:

| AG 1 | Career Planning for Agriculture | 2 |
| :--- | :--- | :--- |
| AG 6 | Career Placement - Ag and Natural Resources | 1 |
| AG 9 | Agriculture and Natural Resources Leadership | 1 |
| AG 94 | Worksite Learning-Agriculture OR |  |
| AG 58 | Student Enterprise Projects | 1 |
| AGAB 53 | Introduction to Agriculture Business | 3 |
| AGAS 11 | Livestock Feeding and Nutrition | 3 |
| AGAS 19* | Principles of Animal Science |  |
| AGMA 44 | Intro. to Const. Skills for Ag and Nat. Resources | 3 |
| AGPS 20* | Plant Science | 4 |
| AGPS 24* | Soils | 3 |
| AGSA 56 | Intro. to Sustainable Ag and Farm Management | 3 |
| RESTRICTED ELECTIVES: (Choose nine units) | 9 |  |
| AGAB 51 | Agriculture Accounting (3) |  |
| AGAB 54* | Agriculture Economics (3) |  |
| ECON 1B* | Principles of Economics (3) OR |  |
| BUAD 76 | Sales (3) OR |  |
| BUAD 77 | Principles of Marketing (3) |  |

## ADDITIONAL GENERAL EDUCATION REQUIRED:

| Computer Literacy testOR <br> AGNR 52 | Computers in Ag and Natural Resources (3) |
| :--- | :--- |

AREA 3: Humanities 3
AREA 6: Multicultural/Living Skills
3
Students planning to transfer to a four-year college or university should consult a counselor or Ag faculty regarding transfer requirements. TRANSFER
REQUIREMENTS MAY BE DIFFERENT FROM AS DEGREE REQUIREMENTS.
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | $43-48$ |
| Additional General Education | 6 |
| General Electives | $6-11$ |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Agriculture - Environmental Horticulture

Also see Agriculture-Horticulture for other Degree/Certificates

## Associate in Science:

PROGRAM DESCRIPTION: The Environmental Horticulture Degree is a $2+2$ program providing students the opportunity to complete all lower division coursework at Shasta College for a B.S. degree in Environmental Horticulture at CSU Chico. This is a special major at Chico State and is only available to transfer students. Students interested in more details about this degree should contact the Horticulture Dept at 242-2210.

While completing degree requirements, students will also receive training adequate for job placement in areas of landscape management, wholesale and retail nursery and related horticultural fields.
This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Demonstrate safe and efficient use of both nursery and landscape tools, equipment and supplies.
2. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs.
3. Design and implement a nursery operation, select and make production schedules for greenhouse crops, and propagate, grow and market nursery crops.
4. Identify 150 landscape trees, shrubs and ground covers and select species suitable for different landscape situations
5. Describe and ißnplement both conventional and sustainable methods for use in the landscape relating to cultural practices, weed control, soil amendments, plant selection and care.
6. Obtain all course work necessary for transfer to a 4-year degree program in horticulture or related field.
7. Explain and apply basic principles of botany to horticulture practices.
8. Safely conduct landscape construction activities in the correct construction sequence. Including the proper installation of: a landscape sprinkler system, a low-volume (drip) irrigation system, concrete and brick pavers and landscape plants and sod.
Continued on next page..

Ag - Environmental Horticulture Degree Program Learning Outcomes (continued):
9. Explain and apply the concepts of job estimating and laws as they pertain to landscape construction and maintenance.
10. Demonstrate landscape maintenance activities and equipment operation in a safe manner. Including the ability to test and evaluate soil fertility, select and apply fertilizers at the proper rate. Recognize common turf grass species and select proper maintenance techniques for each type of turf grass and to prune landscape trees and shrubs.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

| CORE COURSES: |  |  |
| :---: | :---: | :---: |
| AG 6 | Career Placement - Ag and Natural Resources | 1 |
| AGEH 22 | Nursery Practices and Plant Propagation | 2 |
| AGEH 23 | Nursery Practices and Management | 2 |
| AGEH 27, 28 \& 29 | Plant Identification and Taxonomy | 3 |
| AGEH 31 | Landscape Irrigation | 3 |
| AGEH 33* | Environmental Horticulture OR | 3 |
| AGPS 20* | Plant Science |  |
| AGEH 35 | Landscape Design | 3 |
| AGEH 37 <br> AGAB 54* | Nursery and Florist Management OR Agriculture Economics | 3 |
| AGEH 38 | Landscape and Turf Management | 3 |
| AGMA 44 | Introduction to Construction Skills for Ag/Nat Res. | 3 |
| AGPS 24* | Soils | 3 |
| CHEM 2A* | Introduction to Chemistry | 5 |
| CMST 54* or A1* | Small Group Communication | 3 |
| ENGL 1A* | College Composition | 4 |
| HIST 17A* or 17B* | U.S. History and Government | 3 |
| MATH 14* | Introduction to Statistics | 4 |
| POLS 2* | Introduction to American Government | 3 |
| SPAN 1* or C2* | Elementary Spanish | 3 |

Students planning to transfer to a four-year college or university should consult a counselor or Ag faculty regarding transfer requirements. TRANSFER
REQUIREMENTS MAY BE DIFFERENT FROM AS DEGREE REQUIREMENTS.
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 54 |
| Additional General Education | 3 |
| General Electives | $\underline{3}$ |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Agriculture - Equine Science

## Associate in Science:

PROGRAM DESCRIPTION: This curriculum is designed to provide training in a wide variety of jobs available in the Equine industry; jobs including horse training, horse grooming and care, horse packing, stable management, and others. Classes for this major will mainly be offered during the evening program. Students interested in this major should secure a worksite position early in the program to confirm their desire for working in this industry as well as gaining practical experience.

Students planning to transfer to a college or university should consult a Counselor or Agriculture Faculty Advisor regarding transfer requirements. TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS.

Students who do not qualify for advanced levels of mathematics are strongly encouraged to enroll in MATH 100 Technical Applications of Math as preparation for degree requirements. Sixty (60) units are required for an A.S. degree. All graduation requirements are met.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Describe the processes involved and outline major events in the evolution and domestication of the horse
2. Describe career opportunities and requirements for successful employment in the equine industry.
3. Relate basic genetic principles to techniques in breeding selection and mating programs.
4. Develop a ranch plan for an equine facility, incorporating legal requirements and regulations.
5. Demonstrate basic handling of the horse including catching, haltering, leading and tying.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

## CORE COURSES:

AG 1 Career Planning for Agricultur
AG $6 \quad$ Career Placement - Ag and Natural Resources
AG $9 \quad$ Agriculture and Natural Resources Leadership
AG 94
AGAB 51
AGAB 54*
AGAS 11
AGEQ 12
AGEQ 13
AGEQ 21
AGMA 44 Intro. to Const. Skills for Ag and Nat. Resources
AGNR 52 Computers in Agriculture/Natural Resources
AGPS 20* Plant Science
AGPS $24 *$
AGVETT 16 Veterinary Practices

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 43 |
| Additional General Education | 15 |
| General Electives | $\underline{2}$ |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: Completion of the Equine Certificate Program will prepare students for entry level positions in stable management, horse transportation and handling, equine care, feed and health care sales.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Describe the processes involved and outline major events in the evolution and domestication of the horse.
2. Describe career opportunities and requirements for successful employment in the equine industry
3. Relate basic genetic principles to techniques in breeding selection and mating programs.
4. Develop a ranch plan for an equine facility, incorporating legal requirements and regulations.
5. Demonstrate basic handling of the horse including catching, haltering, leading and tying.

Continued on next page..

Ag - Equine Science Certificate (continued):
FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/ag/gainful employment/.

## CERTIFICATE REQUIREMENTS:

## CORE COURSES:

| AG 1 |  |  |
| :--- | :--- | ---: |
| AG 6 | Career Planning for Agriculture | 2 |
| AG 94 | Career Placement - Ag and Natural Resources | 1 |
| AGAS 11 | Worksite Learning | 3 |
| AGEQ 12 | Livestock Feeding and Nutrition | 3 |
| AGEQ 13 | Horsemanship | 3 |
| AGEQ 21 | Horse Husbandry | 3 |
| AGEQ 111 | Handling Problem Horses | 3 |
|  |  | 3 |
| RESTRICTED ELECTIVE COURSES: (Choose nine units) | 9 |  |
| AG 9 | Agriculture and Natural Resources Leadership (1) |  |
| AGEQ 14 | Western Riding and Training (3) |  |
| AGEQ 109 | Equine Reproduction (1.5) |  |
| AGEQ 110 | Horse Training (3) |  |
| AGEQ 112 | Horseshoeing (2) |  |
| AGEQ 113 | Horse Ownership and Basic Handling (3) |  |
| AGEQ 114 | Beginning English Riding and Training (3) |  |
| AGEQ 115 | Intermediate English Riding and Training (2) |  |
| AGMA 44 | Intro. to Const. Skills for Ag and Natural Resources (3) |  |

TOTAL UNITS FOR CERTIFICATE

## Agriculture - <br> Equipment Operations \& Maintenance <br> Certificate:

PROGRAM DESCRIPTION: This curriculum is designed to provide employable skills essential to several occupations and emphasizes the "learning-by-doing" method of instruction on modern up-to-date equipment.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student will:

1. Understand and demonstrate safe heavy equipment operational and maintenance practices.
2. Be able to use heavy equipment to move soil to grade.
3. Be able to perform basic equipment inspections and maintenance procedures.
4. Demonstrate the knowledge and skills to survey, layout and set grade on a construction project.
5. Be able to operate and maintain heavy equipment resulting in minimum impact to the watershed and use appropriate Best Management Practices to control erosion.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/heop/gainful employment/.
CERTIFICATE REQUIREMENTS:

| AGMA 44 | Intro. to Const. Skills for Ag and Nat. Res. OR <br> Beginning Welding | 3 |
| :--- | :--- | :---: |
| AGNR 66 | Watershed Restoration Practicum | 1 |
| AGPS 24 | Soils (3)OR |  |
| DIES 48 | Hydraulics (3.5) | $3-3.5$ |
| CONS 45 | Career Planning/Leadership for Heavy Equip. |  |
| CONS 46 | Equipment Operations and Maintenance | 2 |


| CONS 47 <br> CONS 48 | Project Construction for Equipment Operations Surveying for Equipment Operators | 3 2 |
| :---: | :---: | :---: |
| CONS 55 CONS 94 | Equipment Operations Skills Development OR Worksite Learning for Construction Technology | 1-2 |
| MATH 100* | Technical Applications of Mathematics *or Math Placement Level 3 or higher Aid Certification (Required) | 3 |

## TOTAL UNITS FOR CERTIFICATE

21-22.5
Suggested Courses: CONS 149, AUTO 1, DIES 166, DIES 170, ENGR 118, CMST 54, WELD 170, English, Computers

## Agriculture - <br> Forest Science and Technology

## Associate in Science:

PROGRAM DESCRIPTION: The job market in forestry is strong with respect to both permanent and seasonal employment. On average, $70-80 \%$ of seasonal Natura Resources job openings in northern California are for forestry technicians. Duties will vary, but generally include timber inventory and marking, harvest plan layout, ecosystem restoration work, and wildlife surveys. Today, this new forestry must focus on the ecosystem as a whole while realizing we still need to provide a myriad of values from our forests. Such values include biodiversity, clean air and water, and recreation in addition to wood products. By properly applying ecological principles to manage our forests, we can enhance biodiversity and lessen the impact of our consumption on forests around the world.

On average, seasonal forestry technicians are paid anywhere from $\$ 10-\$ 15$ per hour. Permanent jobs for qualified technicians start around $\$ 30,000-\$ 40,000$ per year with benefits. Students who complete the A.S. degree in Forest Science and Technology will be well prepared to transfer to a four-year degree at Humboldt State, Cal-Poly San Luis Obispo, or other out-of-state institutions such as the University of Idaho Students should contact a member of the forestry/natural resources faculty to discuss career options and courses.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student will:

1. Have the appropriate coursework and field experience to pursue seasonal Forestry Technician jobs or to transfer to a University in a Forestry-related field.
2. Be able to properly identify all common species of trees and shrubs native to the Western US by their scientific and common names and to discuss general uses, site characteristics, and geographic distributions of these species.
3. Be able to apply knowledge of the Silvicultural treatments used to regulate stand, Composition, regenerate stands, increase growth rates, and improve timber quality.
4. Be able to apply skills in the safe use and maintenance of tools and equipment.
5. Be able to apply computer skills using Forestry-related software.
6. Be able to select and implement an appropriate protocol following the scientific method to collect, statistically analyze, evaluate, and document original research data.
7. Be able to accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.
8. Be able to evaluate basic theory, concepts, and ecological principles as they apply to Forestry, Wildlife, Water Resources, and Ecosystem Restoration and will use his/her cumulative skills to think critically and to work out possible solutions to address problems facing Natural Resources managers today and in the future.
9. Be able to apply fundamentals of Wildland fire ecology, behavior, and suppression techniques.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

Continued on next page..

Ag - Forest Science and Technology Degree (continued):

## DEGREE REQUIREMENTS:

CORE COURSES:
AG 6 Career Placement - Ag and Natural Resources
AGNR 1* Introduction to Natural Resources
AGNR $6 \quad$ Native Plant Identification
AGNR 10 Satellite Imagery/Mapping Techniques for NR
AGNR 12 Environmental Policy and Law
AGNR $50 \quad$ Natural Resources Measurements
AGNR $51 \quad$ Silviculture and Fire Ecology
AGNR $52 \quad$ Computers in Agriculture/Natural Resources
AGNR $53 \quad$ Forest Protection and Restoration Ecology
AGNR 55 Introduction to Forest Operations
AGNR 64* Watershed Management and Ecology
AGNR $65 \quad$ Forest Ecology
AGNR 66 Watershed Restoration Practicum
AGNR $70 \quad$ Wildlife Management and Conservation
AGNR $83 \quad$ Introduction to Global Positioning Systems (GPS)
AGNR $94 \quad$ Natural Resources Worksite Learning
*May be used to fulfill General Education requirements. See a counselor.
ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: Major 40
Additional General Education 18
General Electives _ 2
Degree Total 60*
*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Agriculture - Horticulture

Also see Agriculture-Environmental Horticulture for Transfer Degree information

## Associate in Science:

PROGRAM DESCRIPTION: The Green Industry is a huge industry with many different career opportunities. Nursery sales exceed $\$ 55$ billion nationally. California sells $\$ 13.26$ billion in nursery and floral products annually and the Landscape Industry continues to grow rapidly as population increases both statewide and locally. The Shasta College Horticulture Program will introduce students to an array of horticulture opportunities and provide them with the necessary skills to begin a career in the horticultural field. Job opportunities continue to outnumber the number of graduates in our local area. Career choices range from city and county parks; state and federal organizations; garden centers, independent, local and national chains; landscape maintenance business; floral design and arrangement; landscape design and installation and nursery and landscape management positions. Courses include directed practical experience in a modern horticulture facility that includes a floral lab room, 7,000 square feet of greenhouses and 20,000 square feet of landscaping. Many landscaping operations are also done on the beautiful 300 -acre college campus.

Students should contact their counselor or environmental horticulture faculty advisor to choose electives for the particular career they are planning to enter. Particular attention should be paid to course prerequisites.

Students planning to transfer to a college or university should consult a counselor or Horticulture Faculty Advisor regarding transfer requirements. TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM A.S. DEGREE REQUIREMENTS.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of the certificate, the student will:

1. Demonstrate safe and efficient use of both nursery and landscape tools, equipment and supplies
2. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs.
3. Design and implement a nursery operation, select and make production schedules for greenhouse crops, and propagate, grow and market nursery crops.
4. Identify 150 landscape trees, shrubs and ground covers and select species suitable for different landscape situations.
5. Demonstrate skills to assess site or plant cultural issues and make recommendations for enhancing the health of the landscape planting or nursery plants using integrated pest management.
6. Describe and implement both conventional and sustainable methods for use in the landscape relating to cultural practices, weed control, soil amendments, plant selection and care.
7. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.
8. Explain and apply basic principles of botany to horticulture practices.
9. Safely conduct landscape construction activities in the correct construction sequence: Including the proper installation of: a landscape sprinkler system, a low-volume (drip) irrigation system, concrete and brick pavers and landscape plants and sod.
10. Explain and apply the concepts of job estimating and laws as they pertain to landscape construction and maintenance.
11. Demonstrate landscape maintenance activities and equipment operation in a safe manner. Including the ability to test and evaluate soil fertility, select and apply fertilizers at the proper rate. Recognize common turf grass species and select proper maintenance techniques for each type of turf grass and to prune landscape trees and shrubs.
12. Demonstrate a strong work and personal ethic.
13. Demonstrate skills needed to take the Landscape Industries Certified Technician Exam.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

Students who do not qualify for advanced levels of mathematics are strongly encouraged to enroll in MATH 100-Technical Applications of Math as preparation for degree requirements.

CORE COURSES:

| AG 1 | Career Planning for Agriculture | 2 |
| :--- | :--- | :--- |
| AG 6 | Career Placement - Ag and Natural Resources | 1 |
| AGEH 22 | Nursery Practices and Plant Propagation | 2 |
| AGEH 23 | Nursery Practices and Management | 2 |
| AGEH 26 | Integrated Pest Management in Environ. Hort. | 3 |
| AGEH 27 | Plant Identification and Taxonomy | 1 |
| AGEH 28 | Plant Identification and Taxonomy | 1 |
| AGEH 29 | Plant Identification and Taxonomy | 1 |
| AGEH 31.1 | Landscape Irrigation - Design | 1 |
| AGEH 31.2 | Landscape Irrigation - Installation | 1 |
| AGEH 31.3 | Landscape Irrigation - Troubleshoot and Schedule | 1 |
| AGEH 33* | Environmental Horticulture | 3 |
| AGEH 35 | Landscape Design | 3 |
| AGEH 38 | Landscape and Turf Management | 3 |
| AGEH 94 | Horticulture Worksite Learning | 1 |
| AGMA 44 | Introduction to Const. Skills for Ag and Nat. Res. | 3 |
| AGNR 52 | Computers in Agriculture/Natural Resources | 3 |
| AGNR 83 | Introduction to Global Positioning Systems (GPS) | 1 |
| AGPS 24* | Soils | 3 |
| CHEM 2A* | Introduction to Chemistry | 5 |

*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | :---: |
| Major | 41 |
| Additional General Education | 18 |
| General Electives | $\underline{1}$ |
| Degree Total | $\mathbf{6 0 *}^{2}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Ag - Horticulture Certificate listed on next page

Ag - Horticulture (continued):

## Certificate:

PROGRAM DESCRIPTION: The Green Industry is a huge industry with many different career opportunities. Nursery sales exceed $\$ 55$ billion nationally. California sells $\$ 13.26$ billion in nursery and floral products annually and the Landscape Industry continues to grow rapidly as population increases both statewide and locally. The Shasta College Horticulture Program will introduce students to an array of horticulture opportunities and provide them with the necessary skills to begin a career in the horticultural field. Job opportunities continue to outnumber the number of graduates in our local area. Career choices range from city and county parks state and federal organizations; garden centers, independent, local and national chains; landscape maintenance business; floral design and arrangement; landscape design and installation and nursery and landscape management positions. Courses include directed practical experience in a modern horticulture facility that includes a floral lab room, 7,000 square feet of greenhouses and 20,000 square feet of landscaping. Many landscaping operations are also done on the beautiful 300-acre college campus.

Students should contact their counselor or environmental horticulture faculty advisor to choose electives for the particular career they are planning to enter Particular attention should be paid to course prerequisites

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of the certificate, the student should be able to:

1. Demonstrate safe and efficient use of both nursery and landscape tools, equipment and supplies
2. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs
3. Design and implement a nursery operation, select and make production schedules for greenhouse crops, and propagate, grow and market nursery crops.
4. Identify 150 landscape trees, shrubs and ground covers and select species suitable for different landscape situations.
5. Demonstrate skills to assess site or plant cultural issues and make recommendations for enhancing the health of the landscape planting or nursery plants using integrated pest management.
6. Describe and implement both conventional and sustainable methods for use in the landscape relating to cultural practices, weed control, soil amendments, plant selection and care.
7. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.
8. Explain and apply basic principles of botany to horticulture practices.
9. Safely conduct landscape construction activities in the correct construction sequence: Including the proper installation of: a landscape sprinkler system, a low-volume (drip) irrigation system, concrete and brick pavers and landscape plants and sod.
10. Explain and apply the concepts of job estimating and laws as they pertain to landscape construction and maintenance.
11. Demonstrate landscape maintenance activities and equipment operation in a safe manner. Including the ability to test and evaluate soil fertility, select and apply fertilizers at the proper rate. Recognize common turf grass species and select proper maintenance techniques for each type of turf grass and to prune landscape trees and shrubs.
12. Demonstrate a strong work and personal ethic.
13. Demonstrate skills needed to take the Landscape Industries Certified Technician Exam

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/hort/gainful_employment/.

| CERTIFICATE REQUIREMENTS: |  |  |
| :--- | :--- | ---: |
| AG 1 | Career Planning for Agriculture | 2 |
| AG 6 | Career Placement - Ag and Natural Resources | 1 |
| AGEH 22 | Nursery Practices and Plant Propagation | 2 |
| AGEH 23 | Nursery Practices and Management | 2 |
| AGEH 26 | Integrated Pest Management in Environ. Hort. | 3 |
| AGEH 27, 28, 29 | Plant Identification and Taxonomy | 3 |
| AGEH 31.1 | Landscape Irrigation - Design | 1 |
| AGEH 31.2 | Landscape Irrigation - Installation | 1 |
| AGEH 31.3 | Landscape Irrigation - Troubleshoot/Schedule | 1 |
| AGEH 33* | Environmental Horticulture | 3 |
| AGEH 35 | Landscape Design 3 |  |
| AGEH 37 | Nursery and Florist Management | 3 |
| AGEH 38 | Landscape and Turf Management | 3 |
| AGEH 94 | Horticulture Worksite Learning | $1-4$ |
| AGMA 44 | Intro. to Const. Skills for Ag \& Natural Res. | 3 |
| AGNR 52 | Computers in Agriculture/Natural Resources | 3 |
| AGNR 83 | Intro. to Global Positioning Systems (GPS) | 1 |
| AGPS 24* | Soils | 3 |
| ENGL 190 | Reading \& Writing II **(see below for alternative) | 4 |
| MATH 100 | Tech. Applic. of Math or Math Placement Level 3 | 3 |
|  |  |  |
|  |  |  |

**Students may choose one of the following alternatives: ENGL 190 OR a combination of ENGL 191, and two units selected from the following courses: ENGL 192, ENGL 193 or ENGL 194 for a total of 4 units.

## Agriculture - Horticulture - Irrigation

## Certificate:

PROGRAM DESCRIPTION: The Irrigation Certificate Program provides students with the skills, knowledge and hands-on experience necessary to meet the Irrigation Association standards to apply for the Auditor, Contractor or Designer Exams. Students will develop the basic skills and knowledge about irrigation principles and practices. They will explore and become familiar with the current practices in agriculture, landscape, turf management and residential industries Students will have access to practical applications and computer training on these topics as well as worksite learning opportunities. Basic soil and plant science electrical principles and pumping technologies will be covered.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of the certificate, the student should be able to:

1. Demonstrate the ability to communicate with clients, measure and analyze a property, draft a landscape and a residential irrigation design, develop water management schedules, and implement practices based on client needs.
2. Demonstrate safe and efficient use of landscape tools, equipment and supplies
3. Safely conduct landscape construction activities in the correct construction sequence for installation of: a landscape sprinkler system and a low-volume (drip) irrigation system
4. Explain and apply the concepts of job estimating and laws as they pertain to landscape construction and maintenance and utilize this information to calculate job costs.
5. Demonstrate a strong work and personal ethic.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/hort/gainful employment/

## CERTIFICATE REQUIREMENTS:

CORE COURSES:

|  |  |  |
| :--- | :--- | :--- |
| AGEH 31 | Landscape Irrigation | 3 |
| AGEH 35 | Landscape Design | 3 |
| AGPS 24 | Soils | 3 |

AGPS 25 California Water

Continued on next page..

Ag - Horticulture - Irrigation Certificate Requirements (continued):
RESTRICTED ELECTIVES: (Complete one of the following)
AGEH 38 Landscape and Turf Management (3)
AGEH $94 \quad$ Horticulture Worksite Learning (1-4)
AGPS $20 \quad$ Plant Science (4)
AGMA $44 \quad$ Intro. to Const. Skills for Ag. and Nat. Res. (3)
TOTAL UNITS FOR CERTIFICATE: 13 - 16

In addition to the core courses, students will need to complete additional hours of work experience in order to take the Contractor or Designers Certification Exam with the Irrigation Association. Shasta College plans on making these opportunities available through Horticulture Worksite Learning (AGEH 94). Those students taking the Certified Irrigation Contractors exam would also need skills in layout, staking, business, management, and codes.

## Agriculture - Horticulture Landscape \&Turf Management

## Certificate:

PROGRAM DESCRIPTION: Students completing this certificate will be able to plant and maintain landscapes and turf grass for recreational, municipal, commercial and residential use.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of the certificate, the student should be able to:

1. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs.
2. Demonstrate safe and efficient use of landscape tools, equipment and supplies
3. Demonstrate landscape maintenance activities and equipment operation in a safe manner. Including the ability to test and evaluate soil fertility, select and apply fertilizers at the proper rate. Recognize common turf grass species and select proper maintenance techniques for each type of turf grass and to prune landscape trees and shrubs
4. Explain and apply the concepts of job estimating and laws as they pertain to landscape maintenance and utilize this information to calculate job costs.
5. Demonstrate a strong work and personal ethic.
6. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/hort/gainful employment/.
CERTIFICATE REQUIREMENTS:

| AGEH 26 | Integrated Pest Management in Environ. Hort. | 3 |
| :--- | :--- | :--- |
| AGEH 31.1 | Landscape Irrigation - Design | 1 |
| AGEH 31.2 | Landscape Irrigation - Installation | 1 |
| AGEH 31.3 | Landscape Irrigation - Troubleshoot/Schedule | 1 |
| AGEH 38 | Landscape and Turf Management | 3 |
| AGEH 75 | Water Gardening | 1 |
| AGEH 94 | Horticulture Worksite Learning | 1 |
| AGMA 44 | Intro. to Const. Skills for Ag and Natural Res. | 3 |
| AGPS 24 | Soils OR | 3 |
| CONS 46 | Equipment Operations and Maintenance | $\mathbf{3}$ |

## Agriculture - Horticulture Retail Nursery Sales

## Certificate:

PROGRAM DESCRIPTION: This curriculum is designed to help prepare the student for the certification exam administered by the California Association of Nurseries and Garden Centers, and entry into the world of Ornamental Horticulture. The requirement of work experience is an important part of this certification. See details on the CANGC.org website.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of the certificate, the student should be able to:

1. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property and implement practices based on client needs.
2. Demonstrate safe and efficient use of nursery tools, equipment and supplies
3. Identify 150 landscape trees, shrubs and ground covers and select species suitable for different landscape situations.
4. Design and implement a nursery operation, select and make production schedules for greenhouse crops, and propagate, grow and market nursery crops.
5. Demonstrate a strong work and personal ethic.
6. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait/hort/gainful employment/.

REQUIREMENTS FOR CERTIFICATE:

| AGEH 23 | Nursery Practices \& Management | 2 |
| :--- | :--- | ---: |
| AGEH 26 | Integrated Pest Management in Environ. Hort. | 3 |
| AGEH 27 | Plant Identification and Taxonomy | 1 |
| AGEH 28 | Plant Identification and Taxonomy | 1 |
| AGEH 29 | Plant Identification and Taxonomy | 1 |
| AGEH 35 | Landscape Design | 3 |
| AGEH 38 | Landscape and Turf Management | 3 |
| AGEH 94 | Horticulture Worksite Learning | $1-3$ |
|  |  |  |
|  | TOTAL UNITS FOR CERTIFICATE: | $\mathbf{1 5 - 1 7}$ |

RECOMMENDED COURSES (not required):
AGEH 37 Nursery and Florist Management
BUAD $45 \quad$ Human Relations on the Job
BUAD 106 Business Mathematics
MKTG 72 Advertising

## Agriculture - Natural Resources

## Associate in Science:

PROGRAM DESCRIPTION: This curriculum is designed to provide technician-level training for students interested in working in such areas as wildlife, forestry, range, and outdoor recreation. Typical employers include local, county, and U.S. Government agencies, as well as private companies. Particular attention should be paid to course prerequisites and to whether a class is taught during the fall or spring semester, or both.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

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Ag - Natural Resources Degree (continued):

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student will:

1. Have sufficient coursework and field experience to pursue seasonal technician jobs or to transfer to a University in a Natural Resources-related field.
2. Be able to use a taxonomic key or field guide to correctly identify unknown species of plants, birds, mammals, and aquatic invertebrates to the level of genus.
3. Be able to select and use an appropriate protocol following the scientific method to collect, statistically analyze, evaluate, and document original research data.
4. Be able to accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.
5. Be able to evaluate basic theory, concepts, and ecological principles as they apply to Forestry, Wildlife, Water Resources, and Ecosystem Restoration and will use his/her cumulative skills to think critically and to work out possible solutions to address problems facing Natural Resources managers today and in the future.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:
AG $6 \quad$ Career Placement - Ag and Natural Resources 1
AGNR 1* Introduction to Natural Resources 3
AGNR $6 \quad$ Native Plant Identification
AGNR 10 Satellite Imagery/Mapping Tech. for Nat. Res.
AGNR 12 Environmental Policy and Law
AGNR $50 \quad$ Natural Resource Measurements
AGNR 52 Computers in Agriculture/Natural Resources
AGNR 60* Environmental Science (GE-Natural Science)
Watershed Management and Ecology
AG

## Forest Ecology

Watershed R
Wildlife Management and Conservation Introduction to GPS
Natural Resources Worksite Learning
Intro. to Const. Skills for Ag and Natural Resources 3 Soils
3. Be able to accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.
4. Be able to evaluate basic theory, concepts, and ecological principles as they apply to Forestry, Wildlife, Water Resources, and Ecosystem Restoration and will use his/her cumulative skills to think critically and to work out possible solutions to address problems facing Natural Resources managers today and in the future.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/nr/gainful employment/.

## CERTIFICATE REQUIREMENTS:

| AGNR 1 | Introduction to |  |
| :--- | :--- | :--- |
| AGNR 6 | Native Plant Identification | 3 |
| AGNR 10 | Satellite Imagery/Mapping Tech. for Nat. Res. | 3 |
| AGNR 50** | Natural Resources Measurements | 4 |
| AGNR 52 | Computers in Agriculture/Natural Resources | 4 |
| AGNR 65 | Forest Ecology | 3 |
| AGNR 66** | Watershed Restoration Practicum | 3 |
| AGNR 70 | Wildlife Conservation and Management | 1 |
| AGNR 83 | Introductions to GPS | 3 |
| AGNR 94 | Natural Resources Worksite Learning | 1 |
|  |  | 1 |
|  | TOTAL UNITS FOR CERTIFICATE | $\mathbf{2 6}$ |

**These courses also count towards the Watershed Restoration Certificate.

## Agriculture -

## Sustainable Agriculture Science

## Associate in Science:

PROGRAM DESCRIPTION: The Sustainable Agriculture Science Degree at Shasta College provides training for ranching, farming, agriculture production and related careers in vocational education, sales, services and distribution of agriculture-related products. In the core courses, students will receive a broadbased knowledge of agriculture, agri-business management, and both sustainable and traditional agricultural production practices. A hands-on approach provides students with realistic training and education in livestock husbandry, crop production, farm and land management and equipment operations and repair.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Describe the development and dissemination of modern agricultural technologies and land use practices
2. Explain the principles of crop rotation and demonstrate the ability to develop a simple crop rotation plan
3. To frame problems and ask critical questions concerning agricultural sustainability
4. Address complex agricultural problems by using systems thinking and other approaches
5. Describe the principles and practices used to enhance and maintain biological diversity in an agricultural environment.
6. Evaluate the role of soil fertility in an ecological production system.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:

| AG 1 | Career Planning for Agriculture | 2 |
| :--- | :--- | :--- |
| AG 6 | Career Placement -Ag and Natural Resources | 1 |
| AG 9 | Agriculture and Natural Resources Leadership | 1 |

Degree requirements continued on next page...

Sustainable Ag Science Degree requirements (continued):

| AG 94 | Worksite Learning OR |
| :--- | :--- |
| AG 58 | Student Enterprise Projects |
| AGAB 53 | Introduction to Agriculture Business |
| AGAS 11 | Livestock Feeding and Nutrition |
| AGAS 19* | Principles of Animal Science |
| AGMA 44 | Intro. to Cons. Skills for Ag and Natural Resources |
| AGPS 20* | Plant Science |
| AGPS 24* | Soils |
| AGSA 56 | Intro. to Sustainable Ag and Farm Management |
|  | TOTAL UNITS FOR CORE |
|  |  |
|  |  |

OPTION 1 - General Agri. Science Concentration (Choose eight units)
AGAB 51 Agriculture Accounting (3)
AGAB 54* Agriculture Economics (3)
AGMA $42 \quad$ Farm Power and Machinery (3)
CHEM 2A* Introduction to Chemistry (required) (5)
CHEM 2B* Introduction to Organic and Biochemistry (5)
CONS 46 Equipment Operations and Maintenance (3)

| $\text { AGAS } 30$ | Livestock Production (3) |
| :---: | :---: |
| AGEH 22 | Nursery Practices and Plant Propagation (2) |
| AGEH 23 | Nursery Practices and Management (2) |
| AGEH 26 | Integrated Pest Management in Environmental Hort. (3) |
| $\begin{aligned} & \text { AGEQ } 13 \\ & \text { AGEQ } 21 \end{aligned}$ | Horse Husbandry (3) OR Horse Management (3) |
| AGMA 42 | Farm Power and Machinery (3) |
| CONS 46 | Equipment Operations and Maintenance (3) |
| WELD 73 | Structural Steel Metal Fabrication (3) |
| OPTION 3 -Farm, Ranch, and Wildland ManagementConcentration (Choose a total of nine units with at least one course from each area) |  |
|  |  |
| (Area 1) WILDLAND MANAGEMENT CURRICULUM |  |
| AGNR 4 | Introduction to Range Science (3) |
| AGNR 12 | Environmental Policy and Law (2) |
| AGNR 64* | Watershed Management and Ecology (3) |
| AGNR 65 | Forest Ecology (3) |
| AGNR 70 | Wildlife Conservation and Management (3) |
| (Area 2) FARM AND RANCH MANAGEMENT CURRICULUM |  |
| AGAB 51 | Agriculture Accounting (3) |
| AGAS 30 | Livestock Production (3) |
| AGEH 26 | Integrated Pest Management in Envir.Hort. (3) |
| AGEH 31 AGPS 25* | Landscape Irrigation (3) OR California Water (3) |
| AGEH 33* | Environmental Horticulture (3) |
| AGEQ 21 | Horse Management (3) |
| AGMA 42 | Farm Power and Machinery (3) |
| AGVIT 80 | Vineyard Design and Construction (1) |
| AGVIT 81 | Vineyard Care (1) |
| WELD 73 | Structural Steel Metal Fabrication (3) |
| Additional General Education Required for A.S. Degree: |  |
| ENGL 1A* | College Composition 4 |
| CMST 60* | Public Speaking (3) OR 3 |
| CMST 54* | Small Group Communication (3) |
| MATH 102* | Intermediate Algebra (5) OR 3-5 |
| MATH 13* | College Algebra (3) OR |
| MATH 14* | Introduction to Statistics (4) |


| Computer Literacy test $\underline{\text { OR }}$ | $0-3$ |
| :--- | :--- | :--- |
| AGNR 52 Computers in Ag and Natural Resources (3) |  |
| AREA 2: Social and Behavioral Science for some Options | $0-3$ |
| AREA 3: Humanities | 3 |
| AREA 5: Multicultural/Living Skills | 3 |

1. Students planning to transfer to a college or university should consult a counselor or Agriculture faculty regarding transfer requirements. TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM A.S. DEGREE REQUIREMENTS.
2. 60 units and all graduation requirements are required for the AS Degree.
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | $45-51$ |
| Additional General Education | $6-9$ |
| General Electives | $\mathbf{0 - 9}$ |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Agriculture - Veterinary Technician

Currently going through discontinuance process and not available.

## Art

## Associate in Arts:

This Art degree is proposed to be replaced by an Associate of Arts Degree for Transfer in 2013-14. Students are advised to consult with a counselor before choosing the existing Art degree.

PROGRAM DESCRIPTION: This curriculum qualifies the student for the AA degree in Art. Students interested in transferring should check course requirements with counselors or the transfer college.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Describe and successfully apply the elements and principles of art and design to two-dimensional compositions or three dimensional forms.
2. Select appropriate tools and techniques in dealing with a variety of media then demonstrate informed, skilled and sensitive handling in the execution of twodimensional imagery and three-dimensional forms.
3. Investigate, develop and employ conceptual themes which clearly and consistently reflect the student's point of view.
4. Effectively identify and utilize resources for art historical research.
5. Articulate his/her (objective and subjective) understanding of two and three dimensional works in writing.
6. Orally evaluate the works of fellow students and implement suggestions made through the evaluation of his/her work by others.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:
ART 2* History of Western Art Through the Gothic Period
ART 3 ${ }^{*}$ Western Art, Renaissance to Contemporary 3
ART $12 \quad$ Beginning Form, Design and Color 3
ART 13 Intermediate Form, Design and Color 3
ART 21A
ART $\quad$ Beginning Freehand Drawing
Intermediate Freehand

RESTRICTED ELECTIVES: (Choose nine units) 9
ART 15 Three Dimensional Design (3)
ART 17 Shades, Shadows and Perspectives (3)
ART $26 \quad$ Beginning Watercolor (3)
ART $27 \quad$ Intermediate Watercolor (3)
ART $29 \quad$ Beginning Painting (3)
ART 30 Intermediate Painting (3)
ART $31 \quad$ Beginning Figure Drawing (3)
ART 32 Intermediate Figure Drawing (3)
ART $35 \quad$ Beginning Ceramics (3)
ART $36 \quad$ Intermediate Ceramics (3)
ART $45 \quad$ Beginning Glass (3)
ART $46 \quad$ Glass Blowing (3)
ART $50 \quad$ Printmaking (3)
ART $55 \quad$ Beginning Sculpture (3)
ART $56 \quad$ Intermediate Sculpture (3)
ART $57 \quad$ Sculptural Glass (3)
ART 60A Basic Photography and Darkroom (3)
ART 61 Beginning Creative Photography (3)
ART 62 Intermediate Creative Photography (3)
ART $70 \quad$ Introduction to Digital Photography (3)
Continued on next page...

Art Degree Restricted Electives (continued):

| ASSOCIATE IN ARTS DEGREE REQUIREMENTS: |  |
| :--- | :--- |
| Major |  |
| Additional General Education | 27 |
| General Electives | 18 |
| Degree Total | $\underline{15}$ |
| $\mathbf{6 0 *}$ |  |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Automotive Technology

## Associate in Science:

PROGRAM DESCRIPTION: The Automotive Technology Program is designed to prepare students for employment and advancement in the automotive field. Curriculum requirements have been developed for certification by the National Institute for Automotive Service Excellence (ASE) program. The curriculum has been planned to provide technical knowledge and laboratory experiences related to a wide range of automotive applications.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Inspect, diagnose, disassemble, repair, replace and service components/systems in student's area of specialization.
2. Work safely and responsibly within all shop safety and environmental guidelines and standards.
3. Demonstrate competency in accessing and applying technical service information.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:
AUTO $1 \quad$ Vehicle Electrical Systems
AUTO 10 Automotive Electronics
AUTO 20 Engine Performance
AUTO 21 Advanced Engine Performance
AUTO 94 Automotive Worksite Learning
AUTO 130 Automotive Steering \& Suspension
AUTO 131 Automotive Wheel Alignment
AUTO 147 Automotive Braking Systems
AUTO 161 Manual Drive Trains \& Axles
AUTO 162 Automatic Transmissions and Transaxles
AUTO 163 Automotive Heating \& Air Conditioning
College Composition
Career Planning for Industrial Technology
Introduction to Engine Machining
Engine Machining Laboratory
Essential Math

## Certificate:

PROGRAM DESCRIPTION: The objective is to allow the student to gain entry level skills specific to the automotive industry

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Inspect, diagnose, disassemble, repair, replace and service components/systems in student's area of specialization.
2. Work safely and responsibly within all shop safety and environmental guidelines and standards.
3. Demonstrate competency in accessing and applying technical service information.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/auto/gainful employment/.

## CERTIFICATE REQUIREMENTS:

| AUTO 1 | Vehicle Electrical Systems | 3 |
| :--- | :--- | :--- |
| AUTO 10 | Automotive Electronics | 3 |
| AUTO 20 | Engine Performance | 4 |
| AUTO 21 | Advanced Engine Performance | 3 |
| AUTO 94 | Automotive Worksite Learning | 2 |
| AUTO 130 | Automotive Steering \& Suspension | 3 |
| AUTO 131 | Automotive Wheel Alignment | 2 |
| AUTO 147 | Automotive Braking Systems | 3 |
| INDE 150 | Introduction to Engine Machining | 3 |
| INDE 152 | Engine Machining Laboratory | 3 |
| AUTO 161 | Manual Drive Trains \& Axles | 3 |
| AUTO 162 | Automotive Transmissions and Transaxles | 4 |
| AUTO 163 | Automotive Heating \& Air Conditioning | 3 |
| INDE 1 | Career Planning for Industrial Technology | 1 |

TOTAL UNITS FOR CERTIFICATE

## Automotive Technology Automotive Chassis

## Certificate:

PROGRAM DESCRIPTION: Introduction to automotive chassis systems: Principles of automotive brake and suspension systems, wheel balance, tire service, suspension and headlamp alignment; maintenance, troubleshooting procedures, and proper use of alignment and balancing machines, brake lathes and other diagnostic equipment; diagnosis, disassembly, inspection, and rebuilding of suspension and brake systems; emphasis on proper use of manuals and safe use of tools and equipment; preparation for CA State Brake and Lamp licensing exams.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Perform undercar inspections and repair suspension, hydraulic, and active braking systems.
2. Diagnose vehicle alignment concerns.
3. Identify the basic electrical circuits and diagnose automotive electrical systems.
4. Apply the basic principles of physics as they work in the automotive industry.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.
Continued on next page..

Automotive Technology - Automotive Chassis Certificate (continued):
CERTIFICATE REQUIREMENTS:

| AUTO 1 | Vehicle Electrical Systems | 3 |
| :--- | :--- | :--- |
| AUTO 130 | Automotive Steering \& Suspension | 3 |
| AUTO 131 | Automotive Wheel Alignment | 2 |
| AUTO 147 | Automotive Braking Systems | 3 |
|  |  |  |
|  | TOTAL UNITS FOR CERTIFICATE | $\mathbf{1 1}$ |

## Automotive Technology Automotive Electrical-Electronics

## Certificate:

PROGRAM DESCRIPTION: A study of basic electrical theory and the function, diagnosis, and repair of modern automotive electrical systems. Emphasis is placed on the use of instrumentation in the diagnosis of electrical circuits and component failures.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Identify the basic electrical circuits and diagnose automotive electrical systems.
2. Apply the basic principles of physics as they work in the automotive industry.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## CERTIFICATE REQUIREMENTS:

| AUTO 1 | Vehicle Electrical Systems | 3 |
| :--- | :--- | :--- |
| AUTO 10 | Automotive Electronics | 3 |
|  |  | $\mathbf{6}$ |

## Automotive Technology Automotive Engine Performance

## Certificate:

PROGRAM DESCRIPTION: This certificate prepares a student to be successful as an entry-level technician in vehicle electrical systems repairs.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Identify the basic electrical circuits and diagnose automotive electrical systems.
2. Apply the basic principles of physics as they work in the automotive industry.
3. Interpret and analyze automotive fuel, and ignition systems.
4. Utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on various automotive systems.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## CERTIFICATE REQUIREMENTS:

| AUTO 1 | Vehicle Electrical Systems | 3 |
| :--- | :--- | :---: |
| AUTO 10 | Automotive Electronics | 3 |
| AUTO 20 | Engine Performance | 4 |
| AUTO 21 | Advanced Engine Performance | 3 |
|  |  |  |
|  | TOTAL UNITS FOR CERTIFICATE | $\mathbf{1 3}$ |

## Automotive Technology - <br> Automotive Engine Repair

## Certificate:

PROGRAM DESCRIPTION: A study of the principles of automotive engines, fuel and ignition systems, tool and equipment safety, maintenance procedures, use of diagnostic equipment, minor head and block machining, diagnosis, disassembly, inspection, and rebuilding of engines, fuel systems and ignition systems. Also includes introduction to electric and hybrid vehicle principles and maintenance.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Demonstrate an understanding of four-stroke engine theory, basic safe machining practices, and engine assembly.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

REQUIREMENTS FOR CERTIFICATE:
INDE $150 \quad$ Introduction to Engine Machining 3
INDE $152 \quad$ Engine Machining Laboratory 3
TOTAL UNITS FOR CERTIFICATE

## Automotive Technology Automotive Heating - Air Conditioning

## Certificate:

PROGRAM DESCRIPTION: Study of automotive air conditioning systems Principles and systems necessary for the installation, design, function, and repair of air conditioning units; maintenance, troubleshooting procedures, proper use of air conditioning charging station and recovery/recycle equipment; emphasis on proper use of manuals and safe use of tools and equipment.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Identify the basic electrical circuits and diagnose automotive electrical systems.
2. Apply the basic principles of physics as they work in the automotive industry.
3. Demonstrate an understanding of automotive HVAC systems and approved airconditioning service practices.
4. Utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on automotive HVAC systems.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

CERTIFICATE REQUIREMENTS:
AUTO 1 Vehicle Electrical Systems 3
AUTO 10 Automotive Electronics 3
AUTO 163 Automotive Heating \& Air Conditioning 3
TOTAL UNITS FOR CERTIFICATE

## Automotive Technology - <br> Automotive Powertrain <br> Certificate:

PROGRAM DESCRIPTION: Theory, operation, diagnosis, repair and maintenance of drivetrain and automatic transmissions: Single dry-disc clutches, manua transmissions/transaxles, universal joints, final drives, and hydraulically-controlled automatic transmissions and transaxles.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Demonstrate knowledge of the overall operation of an automotive
2. Transmission and differential.
3. Utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on various power train systems.
4. Diagnose vehicle power train concerns.
5. Identify the basic electrical circuits and diagnose automotive electrical systems.
6. Apply the basic principles of physics as they work in the automotive industry.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

CERTIFICATE REQUIREMENTS:

| AUTO 161 | Manual Drive Trains \& Axles | 3 |
| :--- | :--- | :--- |
| AUTO 162 | Automatic Transmissions and Transaxles | 4 |
|  |  | $\mathbf{7}$ |

## Business Administration Accounting Concentration

## Associate in Science:

PROGRAM DESCRIPTION: This degree prepares you to enter the workforce in an entry level accounting, bookkeeping, or clerk position with many private sector and government organizations. This degree also provides an excellent knowledge base for those planning to pursue an advanced degree in accounting, business, economics, or law (Acct 2 and Acct 4 are recommended for these students).

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
2. Identify and illustrate fundamental accounting concepts, classifications, cost systems, cost-volume-profit relationships, budgeting and profit planning to support planning, control and decision making activities of management.
3. Use integrated accounting software in performing the processes of the accounting cycle and preparing the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
4. Prepare and process payroll records and payroll tax returns in compliance with applicable federal and state laws and regulations.
5. Apply the Internal Revenue Code and related Treasury Regulations as they relate to individual, partnership and corporation income taxes; prepare simple individual income tax returns.
6. Explain the criteria for the formation and enforcement of business and consumer contracts, including the specialty areas of sales and agency.
7. Demonstrate the use of skills relevant for problem solving, decision making and solving ethical dilemmas in the business environment including critical thinking, effective written and oral communication, working effectively in teams and the proficient use of computers for information search, retrieval, problem solving and communication.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:

| ACCT 101 <br> ACCT 2 | Basic Accounting-I OR <br> Introduction to Financial Accounting | 3 |
| :--- | :--- | :--- |
| ACCT 102 | Basic Accounting-II OR | 3 |
| ACCT 4 | Introduction to Managerial Accounting | 2 |
| ACCT 103 | PC Accounting | 2 |
| ACCT 104 | Payroll Accounting | 3 |
| ACCT 194 | Income Tax | 3 |
| BUAD 6 | Business Law | 3 |
| BUAD 10* | Introduction to Business | 3 |
| BUAD 15 | Business and Society | 3 |
| BUAD 45* | Human Relations on the Job | 3 |
| BUAD 66* | Business Communications | 1 |
| CIS | Any spreadsheet | 3 |
| CIS 1 | Computer Literacy Workshop | 1 |
| CIS 20 | Access for Windows-I OR | 3 |
| CIS 23 | Introduction to Database Management | 3 |
| OAS 51 | Introduction to Keyboarding and Word | 0.5 |
| OAS 64 | Computerized Ten-Key |  |

*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 36.5 |
| Additional General Education | 15 |
| General Electives | 8.5 |
| Degree Total | $\mathbf{6 0 *}$ |5

Degree Total
*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Business Administration -

General Business Concentration

## Associate in Science:

PROGRAM DESCRIPTION: This degree prepares you to enter the workforce or transfer to a four-year college or university. Career opportunities include entry-level marketing, management, entrepreneur, customer service representative and retail sales. All business requires individuals that have the skills covered in these courses. Explore career opportunities locally, statewide, and nationally. Many courses are offered during the day and evening at one of our extended education campuses, and online.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Explain the criteria for the formation and enforcement of business and consumer contracts, including the specialty areas of sales and agency.
2. Demonstrate the use of skills relevant for problem-solving, decision-making, and resolving ethical dilemmas in the business environment including critical thinking, effective written and oral communication, working effectively in teams and the proficient use of computers for information search, retrieval, problem solving and communication.
3. Identify and explain the current economic indicators regarding inflation, unemployment, monetary and fiscal policy and their effects on consumers and small businesses

Continued on next page..

Business Administration - General Business Concentration Degree Program Learning Outcomes (continued)
4. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
5. Utilize their ability to identify and apply business and finance concepts to advance into upper division course work as business majors in the fields of accounting, finance, marketing, management and information technology and services.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

DEGREE REQUIREMENTS:
CORE COURSES:

| ACCT 101 <br> ACCT 2 | Basic Accounting I OR <br> Introduction to Financial Accounting | 3 |
| :---: | :---: | :---: |
| BUAD 6 | Business Law | 3 |
| BUAD 10* | Introduction to Business | 3 |
| BUAD 15 | Business and Society | 3 |
| BUAD 45 * | Human Relations on the Job | 3 |
| BUAD 66 * | Business Communications | 3 |
| BUAD 91 | Principles of Management OR | 3 |
| CIS 4 | Business Data Communications |  |
| CIS 1 | Computer Literacy Workshop | 3 |
| REAL 30 | Real Estate Principles | 3 |
| RESTRICTED ELECTIVES: (Choose seven units) |  | 7 |
| ACCT 2 | Introduction to Financial Accounting (3) |  |
| ACCT 101 | Basic Accounting I (3) |  |
| ACCT 102 | Basic Accounting II (3) |  |
| BUAD 8 | Business Law (3) |  |
| BUAD 41 | Supervision and Leadership (3) |  |
| BUAD 46 | Fundamentals of Nonprofit Management (1) |  |
| BUAD 47 | Fundraising Techniques and Planning (1) |  |
| BUAD 48 | Grant Funding: Finding the Right Source (1) |  |
| BUAD 49 | Nonprofit Financial Management (.5) |  |
| BUAD 50 | Marketing and Public Relations for Nonprofits (1) |  |
| BUAD 51 | Boards of Directors in Nonprofit Organizations (.5) |  |
| BUAD 52 | Staff \& Volunteer management in Nonprofit Orgs (1) |  |
| BUAD 53 | Accountability Requirements for Nonprofit Orgs (.5) |  |
| BUAD 54 | Nonprofit Policy, Advocacy \& Community Building (.5) |  |
| BUAD 71 | Intro. to e-Commerce (1) |  |
| BUAD 72 | e-Commerce Marketing (1) |  |
| BUAD 76 | Sales (3) |  |
| BUAD 77 | Principles of Marketing (3) |  |
| BUAD 106 | Business Mathematics (3) |  |
| OAS 51 | Introduction to Keyboarding and Word (3) |  |

*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | :--- |
| Major | 34 |
| Additional General Education | 15 |
| General Electives | $\mathbf{1 1}$ |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Business Administration - <br> Management Concentration

## Associate in Science:

PROGRAM DESCRIPTION: This degree prepares you to enter the workforce or transfer to a four-year college or university. This specialized degree includes courses emphasizing supervisory skills. Career opportunities include entry-level marketing, management, entrepreneur, customer service representative and retail sales. If you are aspiring towards a career in management, this is the degree for you. Explore career opportunities locally, statewide, and nationally. Many courses are offered during the day and evening at one of our extended education campuses, and online.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Appraise the creation and enforcement of business contracts.
2. Utilize a strategy for recognizing and solving business ethical dilemmas.
3. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
4. Analyze how the most recent actions of the Federal Reserve Board of Governors are designed to affect the money supply in the marketplace.
5. Develop and apply a business marketing strategy leading to a business plan.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:

| ACCT 101 <br> ACCT 2 | Basic Accounting I OR Intro to Financial Accounting | 3 |
| :---: | :---: | :---: |
| BUAD 6 | Business Law | 3 |
| BUAD 8 | Business Law | 3 |
| BUAD 10* | Introduction to Business | 3 |
| BUAD 15 | Business and Society | 3 |
| BUAD 41 | Supervision and Leadership | 3 |
| BUAD 45 * | Human Relations on the Job | 3 |
| BUAD 66 * | Business Communications | 3 |
| BUAD 71 | Intro to e-Commerce $\underline{\text { OR }}$ | 1 |
| BUAD 72 | e-Commerce Marketing |  |
| BUAD 76 | Sales | 3 |
| BUAD 77 | Principles of Marketing | 3 |
| BUAD 91 | Principles of Management | 3 |
| CIS 1 | Computer Literacy Workshop | 3 |
| CIS/OAS | Computer Applications | 3 |
| RESTRICTED ELECTIVES: (Choose three units) |  | 3 |
| ACCT 2 | Introduction to Financial Accou |  |
| ACCT 101 | Basic Accounting I (3) |  |
| ACCT 102 | Basic Accounting II (3) |  |
| BUAD 46 | Fundamentals of Nonprofit Man |  |
| BUAD 47 | Fundraising Techniques and $P$ |  |
| BUAD 48 | Grant Funding: Finding the Rig |  |
| BUAD 49 | Nonprofit Financial Manageme |  |
| BUAD 50 | Marketing and Public Relations |  |
| BUAD 51 | Boards of Directors in Nonprofit |  |
| BUAD 52 | Staff \& Volunteer management |  |
| BUAD 53 | Accountability Requirements for |  |
| BUAD 54 | Nonprofit Policy,Advocacy \& C |  |
| BUAD 71 | Intro. to e-Commerce (1) |  |
| BUAD 72 | e-Commerce Marketing (1) |  |
| BUAD 106 | Business Mathematics (3) |  |
| OAS 51 | Intro. to Keyboarding and Word |  |
| *May be used to fulfill General Education requirements. See a counselor. |  |  |
| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |  |
| Major |  |  |
| Additional General Education |  |  |
| General Electives |  |  |
| Degree Total |  |  |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Computer Aided Drafting (CAD) Technology

## Associate in Science:

PROGRAM DESCRIPTION: This curriculum is designed to prepare the individual for employment as a Drafter with potential for more rapid advancement into design and other areas of specialization. If engineering transfer is a goal after receiving an A.S. degree, consider alternate engineering transfer courses. See a counselor for details.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Solve detailed multi-step projects in a correct, logical manner and be able to delineate the solution in a neat, clear, easy-to-follow engineering format.
2. Show mathematical mastery of 1) fractional arithmetic as related to scaling and 2) right triangle trigonometry techniques in solving appropriate problems and 3) linear equation solving with messy decimals and/or trigonometric functions.
3. Follow detailed instructions/descriptions of a problem, or task to be tackled, and work through the problem-solving process.
4. Demonstrate proficiency in the following CAD skills.

- Create accurate orthogonal projections from a provided isometric drawing, and correctly placing views, using accepted drafting standards.
- Dimension simple parts, using AutoCad features.

5. Create a resume and portfolio of CAD/design projects.
6. Demonstrate the following attributes of professionalism in the workplace.

- Punctuality
- Dependability
- Appropriate work and/or field dress
- Timeliness in meeting deadlines
- Integrity
- Unwillingness to plagiarize
- Unwillingness to gossip
- Ability to interact positively with peers and supervisors

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

Students must complete the CORE courses listed below with a C or better in addition to 15 units of general education for the Associate in Science degree requirements and 5 general elective units. For a complete description of those requirements, please refer to the "Associate in Science" section of this catalog.
CORE COURSES:
CIS 1 Computer Literacy Workshop 3
ENGR 1A Measurements and Plane Surveying
ENGR 2 Career Planning/Engineering \& Engineering Tech.
ENGR 20 Residential Design
ENGR 21 Residential Design and Architectural Drawing
ENGR 22 Engineering Graphics
ENGR 24 Descriptive Geometry
ENGR 27 Map and Computer-Aided Drafting
ENGR 29 Computer-Aided Drafting
ENGR 30 Intermediate Computer-Aided Drafting
ENGR 31 Architectural Detailing
ENGR 32 Adv. Civil Design Applications for CAD
ENGR 33 Solid Modeling Computer-Aided Drafting
MATH 10* Plane Trigonometry
MATH 102* Intermediate Algebra

- This course may be waived if student can demonstrate appropriate score on the Math Placement Exam or other multiple measures.

RESTRICTED ELECTIVES: (Choose three units)
AGNR $83 \quad$ Introduction to Global Positioning Systems (GPS) (1)
CONS 52 Residential Estimating (3)
CONS $178 \quad$ Building Codes and Standards (3)
ENGR 1B Plane Surveying (3)
ENGR $25 \quad$ Structural Drafting (3)
ENGR $26 \quad$ Industrial Drafting (3)
ENGR 64 Engineering Materials Testing (3)
ENGR $94 \quad$ Engineering Worksite Learning (1-4)
ENGR $97 \quad$ Special Topics (.5-2)
ENGR 98 Special Lab (.5-2)
OAS 10 Excel for Windows-I (1)
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | :---: |
| Major | 41 |
| Additional General Education | 18 |
| General Electives | $\frac{1}{\mathbf{6 0 *}}$ |
| Degree Total |  |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: This certificate is designed to give the student the basic skill-set they need to work in the field of computer-aided drafting. Students must complete the "CORE" with a C or better.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Solve detailed multi-step projects in a correct, logical manner and be able to delineate the solution in a neat, clear, easy-to-follow engineering format.
2. Show mathematical mastery of 1) fractional arithmetic as related to scaling and 2) right triangle trigonometry techniques in solving appropriate problems and 3) linear equation solving with messy decimals and/or trigonometric functions.
3. Follow detailed instructions/descriptions of a problem, or task to be tackled, and work through the problem-solving process.
4. Demonstrate proficiency in the following CAD skills.

- Create accurate orthogonal projections from a provided isometric drawing, and correctly placing views, using accepted drafting standards.
- Dimension simple parts, using AutoCad features.

5. Create a resume and portfolio of CAD/design projects.
6. Demonstrate the following attributes of professionalism in the workplace.

- Punctuality
- Dependability
- Appropriate work and/or field dress
- Timeliness in meeting deadlines
- Integrity
- Unwillingness to plagiarize
- Unwillingness to gossip
- Ability to interact positively with peers and supervisors

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/cad/gainful employment.

## CERTIFICATE REQUIREMENTS:

CORE COURSES:
CIS 1 Computer Literacy Workshop 3
ENGR 1A Measurements and Plane Surveying 3
ENGR 2 Career Planning/Engineering \& Engineering Tech.
ENGR 20 Residential Design
ENGR 21 Residential Design and Architectural Drawing
ENGR 22 Engineering Graphics
ENGR 24 Descriptive Geometry
ENGR 27 Map and Computer-Aided Drafting
ENGR 29 Computer-Aided Drafting
ENGR 30 Intermediate Computer-Aided Drafting
ENGR 31 Architectural Detailing
ENGR 32 Adv. Civil Design Applications for CAD
ENGR 33 Solid Modeling Computer-Aided Drafting
MATH 10 Plane Trigonometry
MATH 102 Intermediate Algebra
demontro 5 the Math Placement Exam or other multiple measures.
Continued on next page..
Computer Aided Drafting (CAD) Technology Certificate (continued):

RESTRICTED ELECTIVES: (Choose three units)
AGNR 83 Introduction to Global Positioning Systems (GPS) (1)
CONS 52 Residential Estimating (3)
CONS $178 \quad$ Building Codes and Standards (3)
ENGR 1B Plane Surveying (3)
ENGR $25 \quad$ Structural Drafting (3)
ENGR 26 Industrial Drafting (3)
ENGR 64 Engineering Materials Testing (3)
ENGR $94 \quad$ Engineering Worksite Learning (1-4)
ENGR 97 Special Topics (.5-2)
ENGR 98 Special Lab (.5-2)
OAS 10 Excel for Windows-1 (1)

TOTAL UNITS FOR CERTIFICATE

## Computer and Information SystemsBusiness Information Systems Concentration

## Associate in Science:

PROGRAM DESCRIPTION: This degree combines the core business courses with courses in the Information Technology (IT) skills area. It prepares you to enter the workforce in an entry level IT related position with many public and private organizations, or to start your own IT related business. The degree also prepares you to transfer to a four-year institution and complete a bachelor's degree in an IT related area.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Demonstrate at a fundamental level of knowledge and understanding of business practices including finance, accounting, marketing, management, human relations, e-commerce, legal and ethical considerations.
2. Given a set of requirements design, develop, and debug a computer program that satisfies the requirements.
3. Demonstrate competence using office software including database, spreadsheet, and word processing.
4. Given a set of requirements design and build a web page that meets the requirements.
5. Build and troubleshoot a computer network involving three computers, an ethernet switch, and IP addressing.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

| CORE COURSES: |  |  |
| :---: | :---: | :---: |
| ACCT 2 | Introduction to Financial Accounting | 3 |
| BUAD 6 | Business Law | 3 |
| BUAD 10* | Introduction to Business (fulfills GE requirement) | 3 |
| BUAD 15 | Business and Society | 3 |
| BUAD 45 * | Human Relations on the Job | 3 |
| BUAD 66 * | Business Communications | 3 |
| BUAD 71 | Introduction to e-Commerce | 1 |
| CIS 2 * | Introduction to Computer Science | 4 |
| CIS 20 | Access for Windows-I (1) OR | 1-3 |
| CIS 23 | Introduction to Database Management (3) |  |
| CIS 31 | CISCO CCNA 1 | 3 |
| CIS 60 * | Visual Basic Programming OR (3) | 3-4 |
| CIS 61 * | C++ Language Programming OR (3) |  |
| CIS 62 * | Java Programming OR (3) |  |
| CIS 63 * | Assembler Language Programming OR (4) |  |
| CIS 64 | Web Programming Using JAVA/PHP/FLASH (3) |  |
| CIS 83 | Web Design Using Dreamweaver | 2 |
| OAS 10 | Excel for Windows - 1 | 1 |
| OAS | Word Processing | 1 |


| RESTRICTED ELECTIVES: (Choose seven units) |  |
| :--- | :--- |
| ACCT 101 | Basic Accounting I (3) |
| BUAD 72 | e-Commerce Marketing (1) |
| BUAD 73 | Web Design/e-Commerce (1) |
| BUAD 106 | Business Mathematics (3) |
| CIS 21 | Access for Windows II (1) |
| CIS 22 | Access for Windows III (1) |
| CIS 32 | CISCO CCNA 2 (3) |
| CIS 50 | Windows 7 - Configuration (1) |
| CIS 60, 61, 62, 63 or 64 (Second Programming Language) (3-4) |  |
| CIS 72 | Fundamentals of Linux (3) |
| CIS 79 | Adv. Web Design Using Dreamweaver \& Adobe (2) |
| CIS 86 | HTML (3) |
| CIS 90 | A+ Certification Preparation/Cisco IT Essentials I (4) |
| CIS 92 | Introduction to Computer Security - Security + (3) |
| CIS 94 | Computer Information Systems Worksite Learning (1) |
| OAS 11 | Excel for Windows II (1) |
| OAS 12 | Excel for Windows III (1) |

*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | $41-44$ |
| Additional General Education | 15 |
| General Electives | $1-4$ |
|  | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Computer and Information Systems Cisco Networking

## Certificate:

PROGRAM DESCRIPTION: This certificate program is awarded to students who have successfully completed the Introduction to Computer Science course and the CCNA sequence of courses. Students learn entry level networking skills that will help prepare them for a career in the Information Technology (IT) field. The program prepares students to take the Cisco CCNA certification exam.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Demonstrate competence in the area of Cisco Networking. To demonstrate competence in this area the student will be able to build networks with the following features: three computers on a LAN using a switch; a router with passwords, interfaces, routing protocol configured; a switch with two VLANs and STP protocol; PPP encapsulation and PAP/CHAP authentication protocols between two routers connected with a serial link.
2. Convert an IP Address and subnet mask from a dotted decimal notation into a binary format. Using the values in a binary format the student will then be able to demonstrate the function of the subnet mask in isolating the network address.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/cis/gainful employment/.
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Computer and Information Systems - Cisco Networking Certificate (continued):

| CERTIFICATE REQUIREMENTS: |  |  |
| :--- | :--- | :--- |
| CIS 2 | Introduction to Computer Science | 4 |
| CIS 31 | CCNA1-Networking/Home and Small Business | 3 |
| CIS 32 | CCNA2-Working at a Small to Med. Business/ISP | 3 |
| CIS 33 | CCNA3-Routing and Switching in the Enterprise | 3 |
| CIS 34 | CCNA4-Designing/Supporting Computer Networks | 3 |

## Computer and Information Systems Computer Networking Concentration CCNA Option

## Associate in Science:

PROGRAM DESCRIPTION: This degree program prepares students for a career working in the Information Technology (IT) field as a computer and network technician. The primary focus of this field is to design, install, and maintain computer and networking systems. The program focuses on three primary areas of study--Cisco networking, Microsoft networking, and computer maintenance. The program prepares students to take certification exams including Cisco CCNA, Comptia A+, and Microsoft MCTS. Specific skills that are taught include switch and router installation, wireless network installation, server installation, communication technologies, host computer installation and troubleshooting, and basic electronics. Throughout the entire curriculum interpersonal skills are taught and emphasized as a vitally important part of the skill set of a successful IT technician.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Demonstrate competence in the area of Cisco Networking. To demonstrate competence in this area the student will be able to build networks with the following features: three computers on a LAN using a switch; a router with passwords, interfaces, routing protocol configured; a switch with two VLANs and STP protocol; PPP encapsulation and PAP/CHAP authentication protocols between two routers connected with a serial link.
2. Demonstrate competence in the area of $\mathrm{A}+$ computer maintenance. To demonstrate competence in this area the student will be able to: accurately identify and explain the function of the CPU, harddrive, RAM, CDROM drive, and video card of a PC.
3. Demonstrate competence in the area of Microsoft Networking. To demonstrate competence in this area the student will be able to: Install Windows Seven Professional; to Manage Users, Computers and Groups in Windows 2008 Server; to Implement, Manage and Maintain Name Resolution; to Plan and Implement Server Roles and Server Security; to Plan and Implement an Active Directory Infrastructure; to Create the Logical Design for an Active Directory Infrastructure; to Create the Logical Design for Network Infrastructure Security.
4. Demonstrate competence in the area of human relations and presentation skills. To demonstrate competence in these areas the student will effectively work with other students in a team setting and effectively present a team network design project to a design review committee consisting of other students.
5. Demonstrate competence in the area of web page design and development. To demonstrate competence in these areas the student will develop and publish a 3-page web site to a server. The site must include the following elements: (1) appropriate overall design elements; (2) working hyperlinks among pages, to an outside site(s), and to an e-mail address; (3) a table; and (4) a form.
6. Demonstrate competence in the area of basic electronics. To demonstrate competence in this area the student will accurately test electronic components such as LED, 7Segment display, pushbutton, speaker and photo sensor, and correctly build circuits with the electronic components and program a microcontroller to manipulate the built circuits.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700

## DEGREE REQUIREMENTS:


${ }^{*}$ May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | $41-42$ |
| Additional General Education | 18 |
| General Electives | $0-1$ |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: This certificate program is very similar to the CIS degree program with the CCNA option. The primary difference is that the general education classes are not required as part of the certificate program. In addition the elective courses for the degree program are not required in the certificate program. These omissions will result in a narrower skill set for completers of this program versus the CIS degree program. However, the essential skills to prepare students for a career in the IT field as a computer and network technician are still taught as part of this program.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Demonstrate competence in the area of Cisco Networking. To demonstrate competence in this area the student will be able to build networks with the following features: three computers on a LAN using a switch; a router with passwords, interfaces, routing protocol configured; a switch with two VLANs and STP protocol; PPP encapsulation and PAP/CHAP authentication protocols between two routers connected with a serial link.
2. Demonstrate competence in the area of $\mathrm{A}+$ computer maintenance. To demonstrate competence in this area the student will be able to: accurately identify and explain the function of the CPU, harddrive, RAM, CDROM drive, and video card of a PC

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CIS - Computer Networking Concentration - CCNA Option Certificate (continued): Program Learning Outcomes: (continued)
3. Demonstrate competence in the area of Microsoft Networking. To demonstrate competence in this area the student will be able to: Install Windows Seven Professional; to Manage Users, Computers and Groups in Windows 2008 Server; to Implement, Manage and Maintain Name Resolution; to Plan and Implement Server Roles and Server Security; to Plan and Implement an Active Directory Infrastructure; to Create the Logical Design for an Active Directory Infrastructure; to Create the Logical Design for Network Infrastructure Security.
4. Demonstrate competence in the area of web page design and development. To demonstrate competence in these areas the student will develop and publish a 3-page web site to a server. The site must include the following elements: (1) appropriate overall design elements; (2) working hyperlinks among pages, to an outside site(s), and to an e-mail address; (3) a table; and (4) a form.
5. Demonstrate competence in the area of basic electronics. To demonstrate competence in this area the student will accurately test electronic components such as LED, 7Segment display, pushbutton, speaker and photo sensor, and correctly build circuits with the electronic components and program a microcontroller to manipulate the built circuits.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/cis/gainful employment/.
CERTIFICATE REQUIREMENTS:

| CERTIFICATE REQUIREMENTS: |  |  |  |
| :--- | :--- | :---: | :---: |
| CIS 2 | Introduction to Computer Science | 4 |  |
| CIS 31 | Cisco CCNA 1 | 3 |  |
| CIS 32 | Cisco CCNA 2 | 3 |  |
| CIS 33 | Cisco CCNA 3 | 3 |  |
| CIS 34 | Cisco CCNA 4 | 3 |  |
| CIS 50 | Windows 7 - Configuration | 1 |  |
| CIS 51 | Windows 7 Enterprise Support Technician | 1 |  |
| CIS 52 | Server 2008 Active Directory Configuring | 1 |  |
| CIS 53 | Server 2008 Network Infrastructure | 1 |  |
| CIS 54 | Server 2008 Server Administrator | 1 |  |
| CIS 55 | Exchange Server 2007, Configuring | 1 |  |
| CIS 81 | Web Design (Expression Web) (1) | OR |  |
| CIS 83 | Web Design Using Dreamweaver (2) | $1-2$ |  |
| CIS 90 | A+Certification Preparation/Cisco IT Essentials I | 4 |  |
| INDE 138 | Fundamentals of Electronics | 3 |  |
|  |  |  |  |

## Computer and Information Systems Web Design

## Certificate:

PROGRAM DESCRIPTION: This program is designed to be an introduction to the basics of designing and building simple Web pages. The curriculum assists students, small business owners, office and IT workers, and hobbyists to design and maintain a presence on the Web.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Use a computer and the internet for daily needs.
2. Build dynamic web pages for personal and business use.
3. Incorporate graphics and photos into web pages.
4. Understand e-commerce basics and how to design a marketable website.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/cis/gainful employment/.

## CERTIFICATE REQUIREMENTS:

ART 80A Graphic Design 2
BUAD $45 \quad$ Human Relations on the Job 3
BUAD 71 Introduction to E-Commerce 1
CIS 64 Web Programming Using Java/PHP/Flash 3
CIS 73 Photoshop
CIS $79 \quad$ Adv. Web Design Using Dreamweaver \& Adobe 2
CIS $83 \quad$ Web Design Using Dream Weaver
CIS 86 HTML 3
TOTAL UNITS FOR CERTIFICATE

## Computer Maintenance

## Certificate:

PROGRAM DESCRIPTION: The Computer Maintenance Certificate Program provides the exposure and training necessary to maintain and troubleshoot common microcomputer systems to the board level. This program provides hands-on training in basic electronics, DOS installation and operation, PC repair and computer management.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Identify and troubleshoot common problems with computer parts and how to solve the associated problems.
2. Describe the different types of memory, how each operate and installation procedure.
3. Install a Microsoft operating system and configure the computer as a typical workstation.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/cis/gainful employment/.

## CERTIFICATE REQUIREMENTS:

BUAD 45 Human Relations on the Job 3
CIS $2 \quad$ Introduction to Computer Science 4
CIS 31 Cisco CCNA 1
CIS $90 \quad$ A+ Certification Preparation/Cisco IT Essentials I 4
INDE 138 Fundamentals of Electronics 3
TOTAL UNITS FOR CERTIFICATE

## Construction Technology

## Associate in Science:

PROGRAM DESCRIPTION: The curriculum prepares students for entry-level employment in the carpentry trade. Award of specific apprenticeship credit will depend on the employer, local union regulations, aptitude of student as well as curriculum completed. Under normal circumstances, credit for partial fulfillment of apprenticeship requirements can be attained.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Explain and demonstrate the use of appropriate personal protective equipment.
2. Identify other construction hazards on your job site, including hazardous material exposures, environmental elements, welding and cutting hazards, confined spaces, and fires.
3. Perform construction math with and without a calculator including adding, subtraction, multiply and divide whole numbers, fractions, percentages as well as decimals in the field.
4. Identify power tools commonly used in the construction trades.
5. Recognize relate and identify basic construction drawing terms, components, symbols and different classifications of construction drawings.
6. Calculate the quantities of lumber and wood products using industry-standard methods.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:
CONS 52 Residential Estimating
CONS 53 Materials of Construction
CONS 54 Survey of the Building Industry
CONS 56 Essentials of Construction
CONS 160 Carpentry Practices
CONS 161 Electrical, Plumbing and Mechanical Systems
CONS $178 \quad$ Building Codes and Standards
ENER $50 \quad$ Renewable Energy and Sustainable Development
ENGR $119 \quad$ Blueprint and Specification Reading (Architectural)
INDE $1 \quad$ Career Planning for Industrial Technology
WELD $70 \quad$ Beginning Welding
3
3
3
3
5
5
3
2
2
1
3

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:
Major
33
Additional General Education
21
General Electives
6
Degree Total 60*
*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: The curriculum prepares students for entry-level employment in the carpentry trade. Award of specific apprenticeship credit will depend on the employer, local union regulations, aptitude of student as well as curriculum completed. Under normal circumstances, credit for partial fulfillment of apprenticeship requirements can be attained.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Explain and demonstrate the use of appropriate personal protective equipment.
2. Identify other construction hazards on your job site, including hazardous material exposures, environmental elements, welding and cutting hazards, confined spaces, and fires.
3. Perform construction math with and without a calculator including adding, subtraction, multiply and divide whole numbers, fractions, percentages as well as decimals in the field.
4. Identify power tools commonly used in the construction trades.
5. Recognize relate and identify basic construction drawing terms, components, symbols and different classifications of construction drawings.
6. Calculate the quantities of lumber and wood products using industry-standard methods.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/cons/gainful employment/.

## CERTIFICATE REQUIREMENTS:

CONS 52 Residential Estimating 3
CONS 54 Survey of the Building Industry 3
CONS 56 Essentials of Construction
CONS $160 \quad$ Carpentry Practices
CONS 161 Electrical, Plumbing and Mechanical Systems
CONS $178 \quad$ Building Codes and Standards
ENGR 119 Blueprint and Specification Reading (Architectural)
MATH $100 \quad$ Technical Applications of Mathematics
TOTAL UNITS FOR CERTIFICATE

## Customer Service Academy

## Certificate:

PROGRAM DESCRIPTION: The Customer Service Academy will equip you with the ability to manage or improve many workplace issues that, if addressed, will lead to improved business productivity. The topics range from conflict resolution to team building to communicating with people (both employees and customers). This is a short list of the ten (10) topics included in the academy. You can register for one or all of the academy topics, depending on the challenging issues you face either personally or professionally. Each course topic requires 9 hours of study and awards .5 units of elective academic credit.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office, therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. List ways in which to communicate more effectively to both internal and external customers.
2. Recognize conflict styles and manage conflict situations utilizing conflict resolution skills.
3. List ways to maintain/change your attitude in order to provide superior customer service.
4. Embrace change within organizations and apply skills to cope with change
5. Self-assess individual attitude, stress, communication style, personality style and apply skills to work with team members who possess different styles.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## REQUIREMENTS FOR CERTIFICATE:

BUAD 81 Stress Management in the Workplace 5
BUAD 82 Managing Organizational Change
BUAD 83 Conflict Resolution
BUAD 84 Attitude in the Workplace
BUAD 85 Customer Service in the Workplace
BUAD 86 Decision Making and Problem Solving
BUAD 87 Team Building
BUAD $88 \quad$ Communicating with People
BUAD 89 Time Management
BUAD $90 \quad$ Values and Ethics
TOTAL UNITS FOR CERTIFICATE 5

## Dental Hygiene

## Associate in Science:

PROGRAM DESCRIPTION: The Dental Hygiene Program is designed to train students to work as dental hygienists who have specific knowledge of the dental hygiene profession, a sophisticated level of thinking ability, and the positive character traits (i.e., responsibility, discipline, and initiative) necessary to succeed at any level in the workplace.

All courses in the program will employ an integrated teaching strategy that will include development of critical skills, competence in oral and written English communication, and competence in applied math for problem solving. In addition, all courses will provide a broad understanding of "all aspects of the field (industry)." The program will be articulated with various transfer institutions so that those students who choose to transfer for further study may do so.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

1. $95 \%$ of those students who are eligible to sit for the National Board Dental Hygiene Examination (NBDHE) will pass their examination on the first attempt.
2. Upon completion and passing the NBDHE, $90 \%$ of those students who are eligible to sit for the State Board Exam will pass their examination on the first attempt.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM:

Space in the program is limited. A new class is enrolled every fall semester. In order to be eligible for enrollment, students must file an enrollment packet with the Admissions office during a designated enrollment period. All qualified applicants are offered enrollment on a space available basis in the order of their application ranking. For specific information see the program web page http://www.shastacollege.edu/HSUP/DNTL/info or call the Division Office 530-3393600.

Students must meet all the following requirements for application:

1. Students must have a high school diploma or its equivalent
2. Completion of prerequisite course requirements. Prerequisites must be completed upon application. No in-progress courses will be accepted.

GRADUATION REQUIREMENTS:
Students must graduate from the Dental Hygiene Program to be eligible to take the state licensing examination. Due to the time commitments of the program, it is strongly recommended that students complete the following additional requirements for graduation before beginning dental hygiene courses:

- Completion of the Humanities requirement
- Completion of competence in mathematics. MATH 102 Intermediate Algebra or MATH 110 Essential Math are the advised courses for meeting this requirement.
- Completion of the multi-cultural awareness requirement
- Completion of computer literacy

HEALTH \& SAFETY CLINICAL CLEARANCE:
Upon acceptance for enrollment from the wait list into the program, students must meet additional clinical requirements. All students participating in clinical experiences must submit proof of immunity of specific immunizations or serum titers, cleared criminal background check, negative drug screen, current physical examination and negative TB screening, and provide current valid Basic Life Support-Health Care Provider card (CPR) for health professional (includes adult, child \& infant resuscitation with two person rescue). Students are financially responsible for meeting these requirements according to established program process.

See division/program web page at http://www.shastacollege.edu/HSUP or call Division Office (530-339-3600) for specific requirements, procedures, and deadlines.

| PREREQUISITE |  |  |
| :--- | :--- | :--- |
| ANAT 1* | Anatomy | 5 |
| PHY 1* | Physiology (with Lab) | 5 |
| MICR 1* | Microbiology | 5 |
| ENGL 1A* | College Composition | 4 |
| CHEM 2A* | Introduction to Chemistry | 5 |
| CHEM 2B* | Introduction to Organic and Biochemistry | 5 |
| SOC 1* | Introduction to Sociology | 3 |


| PSYC 14* | General Psychology | 3 |
| :--- | :--- | :---: |
| CMST 60* <br> CMST 10 | Public Speaking OR <br> Interpersonal Communication | 3 |
| FSS 25* | Nutrition | 3 |
|  | TOTAL PREREQUISITE UNITS | $\mathbf{4 1}$ |

Final selection of qualified applicants is competitive. Please contact the Health Sciences and University Division for information regarding the selection criteria used to evaluate qualified applicants.

## DEGREE REQUIREMENTS:

CORE COURSES:
DNTL 10 Oral Biol
DNTL 11 Oral Radiology
DNTL 12 Head and Neck Anatomy
DNTL 13 Dental Health Education/Seminar
DNTL 14 Introduction to Clinic
DNTL 20 Local Anesthesia and Nitrous Oxide
DNTL 21 General and Oral Pathology
DNTL 23 Patient Management and Geriatrics
DNTL 24 Clinical Practice I
DNTL 25 Clinic I Seminar
DNTL $26 \quad$ Nutrition in Dentistry
DNTL $30 \quad$ Periodontology I
DNTL 31 Pharmacology
DNTL 32 Dental Materials
DNTL 33 Advanced Clinical Topics
DNTL $34 \quad$ Clinical Practice II
DNTL $35 \quad$ Clinic II Seminar
DNTL $40 \quad$ Periodontology II
DNTL $41 \quad$ Practice and Financial Management
DNTL 42 Clinic III Seminar
DNTL 43 Clinical Practice III
DNTL 44 Community Oral Health
DNTL 45 Ethics and Jurisprudence
TOTAL MAJOR UNITS:
*May be used to fulfill General Education requirements.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 97 |
| Additional General Education | 6 |
| General Electives | 0 |
| Degree Total | $\mathbf{1 0 3}^{*}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Diesel Technology

## Associate in Science:

PROGRAM DESCRIPTION: This curriculum prepares the student for entry into the mechanic trade related to heavy equipment and diesel engines. Award of apprenticeship credit for completion of the program will depend on the employer, local union regulations, aptitude of student, as well as the curriculum completed The Diesel Technology major requires technical courses to satisfy the minimum requirements for the major. Students are encouraged to take as many technical courses and related electives as their program will permit. When necessary, auto mechanic courses and diesel courses may be interchanged to satisfy major requirements.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. With an emphasis on general education, explain the basic theory of the subject matter or system for the course of instruction based on industry standards.
Continued on next page..

Diesel Technology Degree Program Learning Outcomes (continued):
2. With an emphasis on general education, analyze a scenario based upon an equipment system failure / problem / complaint.
3. With an emphasis on general education, employ a systematic approach to troubleshooting a system malfunction and prepare a solution.
4. With an emphasis on general education, demonstrate the correct tools/supplies required to diagnose/repair a malfunction.
5. With an emphasis on general education, verify if the path of repair was correct by testing and/or completing a work order/report.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

DEGREE REQUIREMENTS:
CORE COURSES:
DIES 48
Hydraulics 3.5

DIES 49 Advanced Hydraulics 3
DIES 94 Worksite Learning For Diesel Technology
DIES 160 Diesel Engine Electronic Control 4
DIES 161 Diesel Technology Field Training 2
DIES 162 Heavy Duty Power Train
DIES 164 Diesel Performance Analysis
$\begin{array}{ll}\text { DIES } 166 & \text { Diesel Engines } \\ \text { DIES } 170 & \text { Heavy Duty Braking Systems }\end{array}$
ENGL 1A* College Composition
INDE $1 \quad$ Career Planning for Industrial Tech.
MATH 110* Essential Math
WELD Any Advanced Welding Class
WELD $70 \quad$ Beginning Welding
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 45.5 |
| Additional General Education | 15 |
| General Electives | 0 |
| Degree Total | $\mathbf{6 0 . 5}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: This curriculum prepares the student for entry into the mechanic trade related to heavy equipment and diesel engines. Award of apprenticeship credit for completion of the program will depend on the employer, local union regulations, aptitude of student, as well as the curriculum completed.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Explain the basic theory of the subject matter or system for the course of instruction based on industry standards.
2. Analyze a scenario based upon an equipment system failure/problem/ complaint.
3. Employ a systematic approach to troubleshooting a system malfunction and prepare a solution.
4. Demonstrate the correct tools/supplies required to diagnose/repair a malfunction.
5. Verify if the path of repair was correct by testing and/or completing a work order/report.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/dies/gainful employment/.

## CERTIFICATE REQUIREMENTS:

DIES $48 \quad 3.5$
$\begin{array}{llr}\text { DIES } 49 & \text { Advanced Hydraulics } & 3 \\ \text { DIES } 94 & \text { Wrksite Learning For Diesel Technology } & 14\end{array}$
DIES $94 \quad$ Worksite Learning For Diesel Technology $\quad 1-4$
DIES 160 Diesel Engine Electronic Control 4
DIES 161* Diesel Technology Field Training
DIES 162 Heavy Duty Power Train
DIES 164 Diesel Performance Analysis
DIES 166* Diesel Engines
DIES $170 \quad$ Heavy Duty Braking Systems
ENGL 190 Reading \& Writing II ** (see below for alternatives)
INDE $1 \quad$ Career Planning for Industrial Tech.
MATH $100 \quad$ Technical Applications of Mathematics
WELD Any Advanced Welding Class
WELD $70 \quad$ Beginning Welding

TOTAL UNITS FOR CERTIFICATE
45.5-48.5

## Dietary Service Supervisor

## Certificate:

PROGRAM DESCRIPTION: The Dietary Service Supervisor program is designed to prepare students to work in a supervisory role in the food and nutrition services area of the healthcare industry. Graduates of the Shasta College DSS program can lawfully use the title of Dietetic Service Supervisor, as described in CA State Law, Title 22.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

1. Identify the location of applicable laws and regulations and determine compliance to regulatory requirements (state and federal). Determine acceptable standards of care in dietary services. Includes but not limited to California Code of Regulations, Title 22; Federal Code of Regulations; Business and Professions Code of Dietitians and Dietetic Technicians, Registered; and Food and Drug Administration Food Code.
2. Identify the role and limitations (no scope of practice) of the Dietary Service Supervisor under law (Title 22) for the Operation of Food Service.
3. Participate with the Registered Dietitian in the timely review and revision of the facility's policies and procedures to ensure that they are in compliance with regulations and standards of practice. Identify location of Diet Manuals.
4. Assist in the orientation of new employees. Assist in the ongoing, planned staff development of seasoned employees to ensure that they are competent to carry out the functions of the dietary service and trained in approved policies.
5. Assist in the development of Quality Assurance Programs to monitor staff practices for compliance, to determine training needs, and to evaluate resident/patient satisfaction.
6. Assist in the development of planned menu (and disaster menus) to meet the nutritional needs of resident/patients in accordance with the recommended dietary allowances. Ensure that therapeutic menus and standardized recipes are followed, as approved by R.D.
7. Ensure that food is served by methods that conserve nutritive value, flavor and appearance. Ensure that food is prepared in a form designed to meet individual needs and substitutions are of similar nutritive value.
8. Ensure that residents/patients receive and consume foods in the appropriate form as prescribed by the physician who is lawfully authorized to prescribe. Ensure that there is accommodation of food preferences, maintenance of current profile cards are maintained, and provide assistive devices as needed.
9. Ensure that food is stored, prepared, distributed, and served under sanitary conditions to prevent food borne illness. This includes the sanitation oversight of areas assigned to other departments such as the cleaning \& sanitizing of internal components of the ice machine \& nurse pantry refrigerators, trash disposal systems.
10. Ensure that the department runs smoothly (including the food ordering and storage according to applicable state requirements), staffing schedules, employee health, labor relations, safety programs and other duties as assigned by administration.

Continued on next page..

Dietary Service Supervisor Certificate (continued):
FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
www.shastacollege.edu/specs/dss/gainful-employment.
REQUIREMENTS FOR CERTIFICATE:
CULA 50 Sanitation and Safety

| 2 |
| :--- |
| 3 |
| 3 |
| 3 |
| 3 |
| 2 |
| 16 |

## Early Childhood Education

## Associate in Science:

PROGRAM DESCRIPTION: The Early Childhood Education Program prepares students to become teachers and directors in programs providing care and learning opportunities for young children. The college courses focus on training for careers in preschools, Head Start, childcare, infant-toddler and school age care, and family childcare. Programs for young children require different qualifications for teachers and child care providers. The A.S. Degree in Early Childhood Education at Shasta College meets course work qualifications for the Child Development Teacher Permit Level and Title 22 staff qualifications for a teacher and director. Additional specified experience with children is required

The Shasta College Early Childhood Education Program is participating in a statewide Curriculum Alignment Project between California Community Colleges and participating CSU and UC systems. A twenty-four unit core of eight specific Early Childhood Education courses will articulate with participating four year degree programs in Child Development and Early Childhood Education.

There are a minimum of 44 units in the major required for the Associate Science Degree in Early Childhood Education. Students need to complete core-required courses ( 38 units) and an additional 6 units of restricted elective courses. Twentyone (21) General Education units will complete the Associate of Science degree in Early Childhood Education. All courses applied to the ECE A.S. Degree must be completed with a "C" grade or better.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Apply an understanding of principles of child development in planning inclusive and developmentally appropriate curriculum and environments.
2. Exhibit skill in observation and documentation as a vehicle for child and program assessment and curriculum design.
3. Create environments that are healthy, respectful and supportive to children and their families.
4. Utilize positive guidance of young children based on an understanding of cognitive, physical, and social and emotional development of children.
5. Identify professional standards and expectations as based upon NA EYC'S Code of Ethical Conduct.
6. Discuss current trends and issues in the field of Early Childhood Education.
7. Perform common tasks online and access resources and information in regard to current best practices in early education.
8. Identify and exhibit the ability to interact successfully with children and adults from an ever changing society.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

DEGREE REQUIREMENTS:
CORE COURSES:

| ECE $1^{*}$ | Human Development OR |
| :--- | :--- |
| ECE 9 * | Child Growth and Development |

(ECE 9 is recommended for students planning to transfer to a 4 year
program for a degree in Early Childhood Education or Child Development)
ECE 2 * Child, Family, Community 3
ECE $3 \quad$ Early Childhood Program Administration 3

ECE $7 \quad$ Early Childhood Observation \& Assessment 3
ECE $8 \quad$ Teaching Practicum for Young Children 5
ECE $15 \quad$ Child Health, Safety and Nutrition
ECE 17 Principles/Practices of Teaching Young Children
ECE 20 Introduction to Curriculum
ECE 28 * Teaching in a Diverse Society
ECE 30 E.C. Curriculum: Physical Development
ECE 50 E.C. Curriculum: Cognitive Development
ECE 52 Guidance in Adult-Child Relations
3

RESTRICTED ELECTIVES: (Choose six units)
ECE $6 \quad$ Exploring Family Childcare (3)
ECE $10 \quad$ Early Childhood Learning (3)
ECE 12 Infant-Toddler Learning (3)
ECE $14 \quad$ School Age and Adolescent Development (3)
ECE $16 \quad$ Fundamentals of EC Mentoring \& Supervision (2)
ECE 22 EC Curriculum: Infant/Toddler Care (3)
ECE 24 EC Curriculum: School Age Care (3)
ECE 26 The Child With Special Needs (3)
ECE 27 Teaching Children with Special Needs (3)
ECE 40 E.C. Curriculum: Affective Development (3)
ECE $51 \quad$ Early Childhood Staffing and Management (3)
ECE $140 \quad$ Essentials of 40 Developmental Assets (1)
ECE $147 \quad$ Mental Health Awareness in ECE Programs (1)
ECE $152 \quad$ The Young Child: Movement, Rhythm, and Singing (1)
ECE 155 The Young Child: Intro to the Montessori Method (1)
ECE graduates are qualified to work with children ages $0-5$. However, it is recommended that students meet the additional 5 -unit requirement by selecting and completing one of the following Specializations (Infant/Toddler School-Age, or Special Needs in ECE). A Specialization is required for the Master Teacher Level of the Child Development Permit, issued by the California Commission on Teaching Credentialing. Associate and Teacher Levels do not require a Specialization.

INFANT/TODDLER TEACHING SPECIALIZATION
ECE 12 Infant-Toddler Learning
3
ECE 22 E.C. Curriculum: Infant/Toddler Care
SCHOOL-AGE TEACHING SPECIALIZATION
ECE 14 School-Age and Adolescent Development 3
ECE 24 E.C. Curriculum: School-Age Care
SPECIAL NEEDS IN EARLY CHILDHOOD EDUCATION/EARLY INTERVENTION SPECIALIZATION
ECE 263 The Child with Special Needs 3
ECE 27 Teaching Children with Special Needs 3
*May be used to fulfill General Education requirements.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 44 |
| Additional General Education | 15 |
| General Electives | 1 |
| Degree Total | $\mathbf{6 0 *}^{*}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: The Early Childhood Education Certificate offers students initial training to work with young children. After completion of the 17 unit certificate requirements, the student qualifies for employment as an entry-level teacher in private child care settings licensed through the Department of Social Services. The Early Childhood Education Certificate course work also meets the training requirements for the Child Development Associate Teacher Permit issued by the California Commission on Teacher Credentialing.
ECE Certificate continued on next page..

Early Childhood Education Certificate (continued):
The courses listed below may also be applied to an Early Childhood Education AS Degree (See college counselor and Recommended Course Sequence for Associate of Science Degree). All courses to be applied to the Early Childhood Education Certificate must be completed with a "C" grade or better.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Apply principles of child development in planning inclusive and developmentally appropriate curriculum and environments.
2. Utilize positive guidance of young children based on an understanding of cognitive, social and emotional development of children.
3. Create environments that are healthy, respectful, supportive to children and their families
4. Access and apply licensing regulations for early childhood education programs.
5. Identify community resources and agencies available to support children and families.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
www.shastacollege.edu/specs/ece/ececert/gainful-employment/.
CERTIFICATE REQUIREMENTS:
CORE COURSES:


## Early Childhood Education Family Childcare

## Certificate:

PROGRAM DESCRIPTION: The Early Childhood Education Family Childcare Certificate offers students initial training for employment as a family childcare provider. After completion of the 17-unit certification program, the student will be prepared to seek a family childcare provider position or family childcare licensure (assuming ability to pass Community Care Licensing [Social Services Dept.] requirements related to physical site).

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of the certificate, the student should be able to:

1. Apply principles of child development in planning inclusive and developmentally appropriate curriculum and environments
2. Utilize positive guidance of young children based on an understanding of cognitive, social and emotional development of children.
3. Create environments that are healthy, respectful and supportive to children and their families
4. Identify and analyze the elements of professionalism and its importance in family childcare settings.
5. Complete class exercises applying management and operation knowledge by developing an operational structure of a mock family childcare setting.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs/ece/fccert/gainful-employment/

Follow the suggested sequence of courses listed below along with the Shasta College catalog. All courses to be applied to the Early Childhood Education Family Childcare Certificate must be completed with a "C" grade or better.

## CERTIFICATE REQUIREMENTS:

CORE COURSES:

| ECE 1 <br> ECE 9 | Human Development OR Child Growth and Development | 3 |
| :---: | :---: | :---: |
| ECE 2 | Child, Family, Community | 3 |
| ECE 6 | Exploring Family Childcare | 3 |
| ECE 52 | Guidance in Adult-Child Relations | 3 |
| RESTRICTED ELECTIVES: (Choose one course) |  | 3 |
| ECE 12 | Infant/Toddler Learning (3) |  |
| ECE 14 | School-Age Learning (3) |  |
| ECE 17 | Principles/Practices of Teaching Young Children (3) |  |
| ECE 20 | Introduction to Curriculum (3) |  |
| ECE 22 | EC Curriculum: Infant/Toddler Care (3) |  |
| ECE 24 | EC Curriculum: School Age Care (3) |  |
| ECE 26 | The Child With Special Needs (3) |  |
| ECE 27 | Teaching Children with Special Needs (3) |  |
| ECE 28 | Teaching in a Diverse Society (3) |  |
| ECE 30 | EC Curriculum: Physical Development (3) |  |
| ECE 40 | EC Curriculum: Affective Development (3) |  |
| ECE 50 | EC Curriculum: Cognitive Development (3) |  |
|  | TOTAL UNITS FOR CERTIFICATE | 15 |

## Engineering Technology

## Associate in Science:

PROGRAM DESCRIPTION: This curriculum is designed to prepare the individual for employment as an Engineering Technician with the potential for more rapid advancement to positions of greater responsibility in surveying and civil construction, and design.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Solve detailed multi-step projects in a correct, logical manner and be able to delineate the solution in a neat, clear, easy-to-follow engineering format.
2. Show mathematical mastery of 1) fractional arithmetic as related to scaling, 2) right triangle trigonometry techniques in solving appropriate problems and 3) linear equation solving with messy decimals and/or trigonometric functions.
3. Follow detailed instructions/descriptions of a problem, or task to be tackled, and work through the problem-solving process.

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Engineering Technology Degree Program Learning Outcomes (continued):
4. Demonstrate proficiency in the following CAD skills.

- Create accurate orthogonal projections from a provided isometric drawing, and correctly placing views, using accepted drafting standards.
- Dimension simple parts, using AutoCad features.

5. Create a resume and portfolio of CAD/design projects.
6. Demonstrate the following attributes of professionalism in the workplace.

- Punctuality
- Dependability
- Appropriate work and/or field dress
- Timeliness in meeting deadlines
- Integrity
- Unwillingness to plagiarize
- Unwillingness to gossip
- Ability to interact positively with peers and supervisors

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:

| ENGR 1A | Measurements and Plane Surveying | 3 |
| :--- | :--- | :--- |
| ENGR 2 | Career Planning for Engineering \& Engr. Tech. | 1 |
| ENGR 22 | Engineering Graphics | 2 |
| ENGR 24 | Descriptive Geometry | 2 |
| ENGR 29 | Computer-Aided Drafting (CAD) | 2 |
| ENGR 30 | Intermediate Computer-Aided Drafting | 2 |
| ENGR 37 | Statics for Engr. Tech. and Const. Management | 3 |
| ENGR 38 | Strength of Materials for Engr. Tech/Const. Mgmt. | 3 |
| MATH 10* | Plane Trigonometry | 3 |
| MATH 102 * | Intermediate Algebra | 5 |
| PHYS 2A* | General College Physics | 4 |

- This course may be waived if student can demonstrate appropriate score on the Math Placement Exam or other multiple measures

RESTRICTED ELECTIVES: (Choose eleven units)
Architectural Electives
CONS 52 Residential Estimating (3)
CONS 178 Building Codes and Standards (3)
ENGR 20 Residential Design (2)
ENGR $21 \quad$ Architectural Drawing (3)
ENGR 31 Architectural Detailing (2)
ENGR 119 Blueprint/Spec Reading (Architectural) (2)
Civil Electives
ENGR 1B Plane Surveying (3)
ENGR 27 Map and Computer-Aided Drafting (3)
ENGR 32 Adv. Civil Design Applications for CAD (3)
Mechanical Electives
ENGR 33 Solid Modeling Computer-Aided Drafting (2)
ENGR 118 Blueprint and Specification Reading (Mechanical) (2)
Other Electives
AGNR 83
ENGR 25
Structural Drafting (3)
Engineering Materials Testing (3)
Engineering Worksite Learning (1-4)
Special Topics (5-2)
ENGR 98 Special Lab (.5-2)
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 41 |
| Additional General Education | 15 |
| General Electives | 4 |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: This Certificate is designed to provide employable knowledge and skills, with the level of general education reduced from what is required for an AS degree. Students must complete the "CORE" courses with a C or better.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Solve detailed multi-step projects in a correct, logical manner and be able to delineate the solution in a neat, clear, easy-to-follow engineering format.
2. Show mathematical mastery of 1) fractional arithmetic as related to scaling, 2) right triangle trigonometry techniques in solving appropriate problems and 3) linear equation solving with messy decimals and/or trigonometicy functions.
3. Follow detailed instructions/descriptions of a problem, or task to be tackled, and work through the problem-solving process.
4. Demonstrate proficiency in the following CAD skills.

- Create accurate orthogonal projections from a provided isometric drawing, and correctly placing views, using accepted drafting standards.
- Dimension simple parts, using AutoCad features.

5. Create a resume and portfolio of CAD/design projects.
6. Demonstrate the following attributes of professionalism in the workplace.

- Punctuality
- Dependability
- Appropriate work and/or field dress
- Timeliness in meeting deadlines
- Integrity
- Unwillingness to plagiarize
- Unwillingness to gossip
- Ability to interact positively with peers and supervisors

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/engr/gainful employment.

## CERTIFICATE REQUIREMENTS:

CORE COURSES:
ENGR 1A Measurements and Plane Surveying 3
ENGR 2 Career Planning for Engineering and Engr. Tech.
ENGR 22 Engineering Graphics
ENGR 24 Descriptive Geometry
ENGR 29 Computer-Aided Drafting (CAD)
ENGR 30 Intermediate Computer-Aided Drafting
ENGR 37 Statics for Engr. Tech. and Cons. Management
ENGR 38 Strength of Materials f/Engr. Tech/Cons. Mgmt.
MATH 10 Plane Trigonometry
MATH 102 Intermediate Algebra
PHYS 2A General College Physics
PHYS 2A General College Physics

- This course may be waived if student can demonstrate appropriate score on the Math Placement Exam or other multiple measures.

RESTRICTED ELECTIVES: (Choose eleven units)
Architectural Electives
CONS 52 Residential Estimating (3)
CONS 178 Building Codes and Standards (3)
ENGR 20 Residential Design (2)
ENGR 21 Architectural Drawing (3)
ENGR 31 Architectural Detailing (2)
ENGR 119 Blueprint/Specification Reading (Architectural) (2)
Civil Electives
ENGR 1B Plane Surveying (3)
ENGR 27 Map and Computer-Aided Drafting (3)
ENGR 32 Adv. Civil Design Applications for CAD (3)
Mechanical Electives
ENGR 33 Solid Modeling Computer-Aided Drafting (2)
ENGR 118 Blueprint/Specification Reading (Mechanical) (2)
Restricted Electives continued on next page...

Engineering Technology Certificate Restricted Electives (Continued)
Other Electives
ENGR 25
ENGR 26
Structural Drafting (3)
Industrial Drafting (3)
ENGR 64 Engineering Materials Testing (3)
ENGR 94 Engineering Worksite Learning (1-4)
ENGR 97 Special Topics (.5-2)
ENGR 98 Special Lab (.5-2)
AGNR 83 Introduction to Global Positioning Systems (GPS) (1)
TOTAL UNITS FOR CERTIFICATE

## English as a Second Language Certificate of Completion

## Certificate:

PROGRAM DESCRIPTION: This certificate of completion is comprised of six noncredit courses that range from ESL beginning to advanced. These non-credit courses generally serve our immigrant population who seek language skills for employment and daily living. Instruction follows a communication-based approach to language learning. The last level in this sequence, ESL 336, acts as a transition course for students who want to pursue academic studies.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Meet three of the four course level student learning outcomes for the highest level course in the Program, ESL 236 or ESL 336.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

REQUIRED NON-CREDIT COURSES:
ESL 385 Beginning Literacy
ESL 331 Beginning Low
ESL $332 \quad$ Beginning High
ESL 333 Intermediate
ESL 334 Intermediate High
ESL 336 Advanced

## Family Studies

## Associate in Science:

PROGRAM DESCRIPTION: This program is designed to provide students with foundational skills and concepts about human interaction within the primary social, cultural, and economic system of our society - the family. Individual and family issues that arise from changing societal patterns have created a vast need for a variety of support services. Students with an A.S. Degree in Family Studies will have the opportunity to enter the Human Services field in a number of paraprofessional positions, and with additional coursework would be prepared to transfer to a four-year college/university with lower division preparation for a Bachelor's of Social Work.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Identify the impact of the context (historical, cultural, societal, and/or familial) on individuals as they develop, as well as the reciprocal influences, and apply this understanding when analyzing human behavior.
2. Integrate the perspectives of continuity and change, multidirectional pathways, and resiliency when evaluating the process of personal and interpersonal development throughout the lifespan.
3. Identify crucial elements of various systems perspectives and apply these concepts in the analysis of specific situations.
4. Reflect a critical awareness of current issues and valid scientific research in the field of Family Studies/Human Services.
5. Create a comprehensive action plan that reflects both personal and interpersonal effectiveness within the physical, mental, financial and psychosocial domains.
6. Differentiate between personal values and professional guidelines/ethics established within the field of Human Services.
7. Complete at least one semester of guided, practical experience in the workplace that integrates classroom experience with professional training.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

There are a minimum of 44 units in the major required for the Associate Science Degree in Family Studies. Twenty-one (21) units of General Education, plus electives to total 60 units will complete the A.S. Degree requirements. Some major courses may be double counted toward the General Education unit requirement. Students planning to transfer to a Social Work Baccalaureate Program should consider utilizing available General Education units and elective units to complete the specific lower division requirements of the transfer school of their choice. It is imperative to consult the catalog of that institution.

| CORE COURSES: |  |  |
| :--- | :--- | ---: |
| CMST 10* | Interpersonal Communication | 3 |
| ECE 1* | Human Development | 3 |
| ECE 2* | Child, Family and Community | 3 |
| FSS 10 | Introduction to Human Services | 3 |
| FSS 12 | Standards and Practices in Human Services | 3 |
| FSS 16* | Marriage \& Family | 3 |
| FSS 18* | Adulthood and Aging | 3 |
| FSS 25* | Nutrition OR | 3 |
| BIOL 5* | Introduction to Human Biology |  |
| FSS 46* | Personal Finance OR | 3 |
| ECON 1A* | Principles of Economics (MICRO) OR |  |
| ECON 1B* | Principles of Economics (MACRO) |  |
| FSS 60* | Life Management | 3 |
| FSS 94 | Family Studies \& Services Worksite Learning | $1-4$ |
| PSYC 1A* | General Psychology | 3 |
| PSYC 41* | Cultural/Social Context of Childhood | 3 |
| SOC 1* | Introduction to Sociology | 3 |
| SOC 70* | Social Welfare | 3 |

*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 43 |
| Additional General Education | 9 |
| General Electives | 8 |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Fire Technology

## Associate in Science:

PROGRAM DESCRIPTION: The Fire Technology curriculum is planned to serve both as an in-service program and as a pre-employment two-year program for community college students aspiring to enter the field of firefighting. Fire Technology majors may be required to fulfill a tour of duty at a local fire station. The suggested course sequence has been supplied to the Counseling Division by the Instructional Division. Students are urged to use this outline along with the Shasta College catalog. Particular attention should be paid to course prerequisites and to whether a class is taught Fall or Spring semester or both. Courses listed may be offered either spring or fall semesters, or at the discretion of the division.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

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## Fire Technology Degree (continued):

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Possess the necessary skills, knowledge and abilities to enter the fire service or to increase skills, knowledge and abilities for those already employed as a firefighter.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:
BIOL 5* Introduction to Human Biology 3
CMST* CMST 10, 20, 54 or 60
3

FAID 175
FIRS $70 \quad$ Fire Protection Organization
FIRS $71 \quad$ Fire Behavior and Combustion
FIRS 72 Fire Prevention Technology
FIRS $74 \quad$ Fire Protection Equipment and Systems
FIRS $79 \quad$ Fundamentals of Personal Fire Safety
FIRS $85 \quad$ Fire Command IA
FIRS $86 \quad$ Building Construction for Fire Protection
FIRS 101 Career Placement
FIRS 189 Fire Investigation
FSS 25* Nutrition
*May be used to fulfill General Education requirements.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 37 |
| Additional General Education | 12 |
| General Electives | 11 |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Firefighter 1

## Certificate:

## PROGRAM DESCRIPTION:

Firefighter 1 includes everything necessary to; learn the essential skills, obtain the required knowledge and abilities to perform at the entry level in a volunteer or paid fire department as a firefighter in the State of California. This Academy adheres to the curriculum as required by the California State Fire Marshal's Office (CAL-FIRE) for certification by their office as a "Certified Firefighter 1". Certification is obtained only after successful completion of the Firefighter 1 Academy, and a minimum of six months full time employment with an organized, paid fire department, or twelve months of part time employment with an organized volunteer fire department. Upon successful completion of the Academy and the required work time, the Chief of the department in which the student works verifies successful work completion and the student makes application for their California State Firefighter 1 Certificate.

The Firefighter 1 Academy is an intense program including rigorous physical conditioning, English designed for firefighters as well as classroom and field training with the same tools and appliances used by the fire service. During the later portion of the academy students earn a State Fire Marshal Certificate for "Fire Control Three" as part of their Live Fire Training. The course also includes Emergency Medical Responder in which the students earn certification from the California Emergency Medical Authority.

Note: No college in California certifies individuals as Firefighter 1 or Firefighter 2. All certifications are issued by the California State Fire Marshal.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Demonstrate the basic knowledge, skills and abilities to safely perform the tasks required to become an entry level firefighter.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## CERTIFICATE REQUIREMENTS:

FIRS 104 Firefighter IAcademy

TOTAL UNITS FOR CERTIFICATE
21

21

Students wishing to apply for California State Fire Marshal's Office Firefighter I or II certification must meet the following criteria:

- Complete the required coursework as outlined by the State Fire Marshal's Office.
- Work a minimum of either six months as a paid full-time firefighter or 12 months as a volunteer.
- A recommendation and signature on appropriate form from the Fire Chief of the department that a student works for or volunteers at is a mandatory requirement.

Note: No college in California certifies individuals as Firefighter I or Firefighter 2. All certifications are approved by the California State Fire Marshal's Office

## Firefighter 2

## Certificate:

## PROGRAM DESCRIPTION:

The Firefighter 2 certification entails advanced knowledge, skills and abilities gained only after the completion of the Firefighter 1 Academy and the required employment interval with an organized volunteer or paid fire department in the state of California. These advanced skills, knowledge and abilities are presented during the Firefighter 2 academy at Shasta College. The successful completion of this Firefighter 2 academy allows the student to operate at a "journeyman level" as a firefighter.

Note: No college in California certifies individuals as Firefighter 1, or Firefighter 2. All certifications are issued by the California State Fire Marshal.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Demonstrate advanced knowledge, skills and abilities to safely perform the tasks required to become an advanced firefighter.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

CERTIFICATE REQUIREMENTS:

| FIRS 104 | Firefighter I Academy |
| :--- | :--- |
| FIRS 108 | Firefighter |

FIRS $108 \quad$ Firefighter II Academy
TOTAL UNITS FOR CERTIFICATE

Students wishing to apply for California State Fire Marshal's Office Firefighter I or II certification must meet the following criteria:

- Complete the required coursework as outlined by the State Fire Marshal's Office.
- Work a minimum of either six months as a paid full-time firefighter or 12 months as a volunteer
- A recommendation and signature on appropriate form from the Fire Chief of the department that a student works for or volunteers at is a mandatory requirement.

Note: No college in California certifies individuals as Firefighter I or Firefighter 2. All certifications are approved by the California State Fire Marshal's Office.

## Fire Technology Wildland Firefighter 1 Academy

## Certificate:

PROGRAM DESCRIPTION: Students completing this certificate will have the basic firefighting training as required by the U.S. Forest Service and California Department of Forestry for seasonal or permanent employment in fire fighting.
This Academy provides the students with all the required knowledge, skills and abilities as required and dictated by the United States Forest Service ( USFS ) and the California Department of Forestry and Fire Protection (CDF or Cal-Fire) for a certificate required by those two wildland fire agencies for seasonal wildland firefighter employment.
The focus of this academy is wildland fire control and safety in the wildland fire environment.

Students who successfully complete this academy obtain the very basic skills, knowledge, and abilities to perform at the entry level as a wild land firefighter. More advanced wild land courses are contained in the Shasta College Course Catalog. Both the State and Federal wildland Fire Agencies provide their own more advance training once employment is obtained.

Note; Successful completion of the Wildland Firefighter 1 Academy does not assure employment with the USFS or CAL-FIRE.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Demonstrate the basic knowledge, skills and abilities to safely perform the tasks required by the United States Forest Service and the California Department of Forestry and Fire Protection (CAL Fire) as an entry level wildland firefighter.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700

CERTIFICATE REQUIREMENTS:
FIRS 73 Wildland Firefighter I Academy 4
TOTAL UNITS FOR CERTIFICATE

## Geographic Information Systems

## Certificate:

PROGRAM DESCRIPTION: Geographic Information Systems (GIS) are applied in a wide array of fields including planning, business, public health, natural resource management and emergency response. The Geographic Information Systems (GIS) Certificate at Shasta College provides students the skills needed to apply a range of geospatial technologies and tools in a variety of applications. Students develop foundation skills in map use and in working with geographically referenced data. From this foundation, GIS fundamentals are taught, both in conceptual and practical terms. Data from a range of sources, from global positioning systems (GPS) to the Internet, are integrated to produce maps and answer geographic questions. Worksite learning allows students to gain GIS work experience.
Refer to http://www.shastacollege.edu/gis/ for more information.
This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Explain and summarize key GIS concepts and applications.
2. Demonstrates understanding of GIS project design, planning, and implementation.
3. Performs essential GIS data-related operations: acquisition, editing, attribution, georeferencing, conversion, and integration.
4. Perform GIS analysis using queries, overlay functions, and models.
5. Produce effective maps and related output products.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/gis/gainful employment.

## CERTIFICATE REQUIREMENTS:

CORE COURSES:
GEOG 5 Digital Planet 3
GEOG 11 Map Principle
GIS 1 Survey of Digital Mapping
GIS $10 \quad$ Introduction to GIS
GIS 20 Spatial Databases
GIS 22 GIS Data Creation
GIS 23 Raster GIS
GIS 25 GIS Projects
GIS $94 \quad$ Worksite Learning
RESTRICTED ELECTIVES: (Choose two units)
AGNR 83 Introduction to GPS (1)
CIS 20-22 Access for Windows (1)
CIS 52 Windows 2008 Server (1)
CIS $54 \quad$ Windows 2008 Server Administration (1)
GIS 21 GIS-CAD Integration (1)
GIS $24 \quad$ Customizing GIS (1)
GIS 97 Special Topics in GIS (1)
TOTAL UNITS FOR CERTIFICATE 17

RECOMMENDED COURSES (not required):
AGNR 10 Satellite Imagery/Mapping Techniques for NR 4
AGNR $52 \quad$ Computers for Agriculture and Natural Resources 3
ENGR 1A Plane Surveying
ENGR 27 Map and Computer-Aided Drafting
ENGR 29 Computer-Aided Drafting
CIS $1 \quad$ Computer Literacy Workshop
CIS 2 Introduction to Computer Science
CIS 23 Introduction to Database Management
CIS 53 Windows 2008 Server Network Infrastructure
CIS 61 C++ Programming
CIS 64 Web Programming Using Java/PHP/Flash
CIS 73-74 Photoshop
GEOG 1A Physical Geography
GEOG 1AL Physical Geography Lab

## Hospitality - <br> Baking - Culinary Arts Emphasis

## Certificate:

PROGRAM DESCRIPTION: This certificate provides a foundation in business mathematics, safety and sanitation principles and practices for personal and institutional application, and fundamental baking skills for students who intend to specialize in baking and pastry making for commercial production. Production of yeast and quick breads, cakes, cookies, pies, and pastries, as well as decorating and icings are undertaken. This certificate provides a base for students interested in basic baking techniques and who are also interested in moving forward with additional skills in the Culinary Arts field.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Explain and apply sanitation guidelines related to food handling.
2. Problem-solve recipe calculations associated with baked goods and pastry production.
3. Define and describe classic cooking terminology associated with baking.
4. Demonstrate health and safety and hand tool usage.
5. Demonstrate usage of a calculator to determine accurate recipe costing of baked goods

Continued on next page...

Hospitality - Baking - Culinary Arts Emphasis Certificate (continued)
FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

CERTIFICATE REQUIREMENTS:
BUAD $106 \quad$ Business Math or Math Placement Level 3 or higher 3
CULA $50 \quad$ Safety and Sanitation 2
CULA 172 Baking 2
TOTAL UNITS FOR CERTIFICATE

## Hospitality -

Bartender - Culinary Arts Emphasis

## Certificate:

PROGRAM DESCRIPTION: Students completing this certificate will be able to apply safety and sanitation principles and practices for a beverage operation, describe service skills for wine, beer, and spirits products, and identify wines from the wine districts of California, France, Germany, and Italy. This certification will provide knowledge and skills for those entering a new position for those interested in sharpening their skills in a current position. Limitation on enrollment: Students must be 21 years of age or older to complete this certificate.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

1. Describe commonly used beverages and their recipes used in the hospitality industry.
2. Define the differences between spirits, wines, fortified wines, and liqueurs.
3. Describe the winemaking and beer-making process.
4. List and describe the major winemaking regions of the United States and Europe.
5. Explain and apply sanitation guidelines related to beverage handling in an hospitality organization.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

CERTIFICATE REQUIREMENTS:

| CULA 50 | Safety and Sanitation | 2 |
| :--- | :--- | :--- |
| CULA 60 | Beverage Management | 2 |
| CULA 73 | Introduction to Wine | 2 |
|  |  | $\mathbf{6}$ |

## Hospitality-Dining Room Management Culinary Arts Emphasis

## Certificate:

PROGRAM DESCRIPTION: This certificate provides a foundation for students interested in entry level dining room management. In addition to an overview of the hospitality industry, areas of focus will include legal aspects of hospitality operations, principles of safety and sanitation, skills for delivery of effective service in a dining room environment, theory of wine sales and service, and business mathematics.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Describe the flow of service between a dining room and kitchen in a restaurant environment.
2. Assess staffing needs based upon levels of projected business.
3. Illustrate safety and sanitation practices in food and beverage handling.
4. Describe wine sales and service techniques in a dining room.
5. Plan an effective dining room layout design for staffing and service.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

CERTIFICATE REQUIREMENTS:
BUAD 106 Business Math or Math Placement Level 3 or higher 3 CULA 50 Safety and Sanitation
CULA 65 Dining Room Service
CULA 73 Introduction to Wine
HOSP 10 Introduction to Hospitality Restaurants, Hotels, and Lawful Management
HOSP 45

TOTAL UNITS FOR CERTIFICATE
12-15

## Hospitality - Dining Room Staff Culinary Arts Emphasis

## Certificate:

PROGRAM DESCRIPTION: Students completing this certificate will have practiced and demonstrated basic skills for front-of-the-house service in a live food and beverage operation. Additionally, students will apply principles of safety and sanitation and business mathematics. This certificate provides skills necessary for an entry-level food service position.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Illustrate safety and sanitation practices in food and beverage handling.
2. Describe the flow of service between a dining room and kitchen in a restaurant.
3. Plan an effective dining room layout design for staffing and service.
4. Assess staffing needs based upon levels of projected business.
5. Describe the sequence of service associated with exemplary dining room service.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

CERTIFICATE REQUIREMENTS:

| BUAD 106 | Business Math or Math Placement Level 3 or higher | 3 |
| :--- | :--- | :---: |
| CULA 50 | Safety and Sanitation | 2 |
| CULA 65 | Dining Room Service | 3 |
|  |  | $\mathbf{5 - 8}$ |

## Hospitality - <br> Line Cook - Culinary Arts Emphasis

## Certificate:

PROGRAM DESCRIPTION: This certification prepares a student with the basic skills to be a line cook in a food operation. Students will recognize the importance of safety and sanitation, prepare food, demonstrate plate presentations, use weights and measures, and interpret recipes.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

Continued on next page...

Hospitality - Line Cook - Culinary Arts Emphasis (continued):
PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Explain and apply sanitation guidelines related to food handling.
2. Demonstrate station organization, purchasing, storage, menu writing, and sanitation principles.
3. Calculate operation budget, ' various food and labor costs, menu pricing, inventory controls, and forecasting.
4. Demonstrate production line management and organization.
5. Identify and apply guidelines for handling of meats, dairy products, fresh produce, and bakery items.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

CERTIFICATE REQUIREMENTS:

| CULA 45 | Basic Food Production | 5 |
| :--- | :--- | :--- |
| CULA 46 | Advanced Foods | 5 |
| CULA 50 | Safety and Sanitation | 2 |

CULA $50 \quad$ Safety and Sanitation 2
HOSP 10 Introduction to Hospitality 3
TOTAL UNITS FOR CERTIFICATE

## Hospitality - Winemaking and Marketing Certificate:

PROGRAM DESCRIPTION: The Winemaking and Marketing Certificate is designed to provide students with hands-on experience in winemaking, viticultural practices, and wine analysis. It is intended for the entrepreneur exploring business opportunities in the grape wine industry, and/or the prospective small winery employee, as well as the home winemaker, interested in career or skills development. Hands-on winemaking from crush through fermentation, sensory evaluation, product marketing, and food and wine pairing will be covered.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Define fundamental concepts of winemaking and marketing.
2. List and describe all basic tasks required for winemaking.
3. Assess results from different sensory evaluation techniques winetasting.
4. Apply principles of wine chemistry.
5. Define principles associated with creation and maintenance of a vineyard.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs/cula/winecert/gainful-employment/.

CERTIFICATE REQUIREMENTS:

| AGEH 94 | Horticulture Worksite Learning | 1 |
| :--- | :--- | :--- |
| AGVIT 80 | Vineyard Design and Construction | 1 |
| AGVIT 81 | Vineyard Care | 1 |
| CULA 66 | Wine With Food | 2 |
| CULA 73 | Introduction to Wine | 2 |
| CULA 74 | Basic Winemaking | 2 |
| CULA 76 | Intermediate Winemaking | 2 |
| CULA 78 | Sensory Evaluation of Wine | 2 |
| CULA 80 | Wine Sales and Marketing | 3 |
| CULA 88 | Wines of the North State | 1 |
|  |  | $\mathbf{1 7}$ |

## Hospitality Management Culinary Arts Concentration

## Associate in Science:

PROGRAM DESCRIPTION: With this degree, graduates enter the culinary field well prepared for entry-level employment, many progressing to management positions. Students will apply principles in sanitation and safety, hospitality, basic food production, nutrition, management, advanced cuisine, and gourmet food preparation. Business communications and general education requirements are also required for the degree. Hands-on worksite learning provides the student additional experience in the field.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Prepare workstations, corresponding to the preparation and presentation of a meal, in a time-restricted quality-minded setting.
2. Prepare large scale quantity items in a time-restricted quality-minded setting.
3. Practice the principles of sanitation and safety procedures.
4. Recognize the types of gourmet foods served in hotels and restaurants and the presentation of these specialties.
5. Demonstrate the principles of the garde-manger section of the kitchen.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:
BUAD 66* Business Communications
CULA 45 Basic Food Production 5
CULA 48 Gourmet Food Preparation
CULA 49 Menu Planning and Cost Analysis
CULA $50 \quad$ Sanitation and Safety
CULA 55 Purchasing
CULA $60 \quad$ Beverage Management
CULA 65 Dining Room Service
CULA 75 Pastry
CULA $94 \quad$ Culinary Arts Worksite Learning
CULA 159 Stocks, Soups, Sauces \& Basic Culinary Prep
CULA 161 The Art of Garde Manger
CULA $172 \quad$ Baking
FSS 25* Nutrition
HOSP 10 Introduction to the Hospitality Industry
HOSP 65 Hospitality Supervision

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 45 |
| Additional General Education | 15 |
| General Electives | 0 |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Certificate listed on next page..

Hospitality Management - Culinary Arts Concentration (continued):

## Certificate:

PROGRAM DESCRIPTION: With this certificate, students will enter the Culinary Arts field and should be able to demonstrate principles in sanitation and safety, hospitality, basic food production, nutrition, and business mathematics. Additional skills will be applied in beverage management, advanced foods, menu planning and cost analysis, human resources management, purchasing, dining room service, baking, supervision, garde manger, and actual worksite learning.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Prepare workstations, corresponding to the preparation and presentation of a meal, in a time-restricted quality-minded setting.
2. Prepare large scale quantity items in a time-restricted quality-minded setting.
3. Practice the principles of sanitation and safety procedures.
4. Recognize the types of gourmet foods served in hotels and restaurants and the presentation of these specialties.
5. Demonstrate the principles of the garde-manger section of the kitchen.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
www.shastacollege.edu/specs/cula/culacert/gainful-employment/.
CERTIFICATE REQUIREMENTS:

| BUAD 106 | Business Mathematics | 3 |
| :--- | :--- | ---: |
| CULA 45 | Basic Food Production | 5 |
| CULA 46 | Advanced Foods | 5 |
| CULA 48 | Gourmet Foods Preparation | 3 |
| CULA 49 | Menu Planning and Cost Analysis | 2 |
| CULA 50 | Sanitation and Safety | 2 |
| CULA 55 | Purchasing | 2 |
| CULA 60 | Beverage Management | 2 |
| CULA 65 | Dining Room Service | 3 |
| CULA 94 | Culinary Arts Worksite Learning | 2 |
| CULA 159 | Stocks, Soups, Sauces \& Basic Culinary Prep. | 2 |
| CULA 161 | The Art of Garde Manger | 2 |
| CULA 172 | Baking | 2 |
| FSS 25 | Nutrition | 3 |
| HOSP 10 | Introduction to the Hospitality Industry | 3 |
| HOSP 65 | Hospitality Supervision | 3 |
|  |  |  |

TOTAL UNITS FOR CERTIFICATE

## Hospitality Management - Hotel/ Restaurant Management Concentration

## Associate in Science:

PROGRAM DESCRIPTION: The course of study in hospitality management includes instruction in hotel and restaurant operations designed to prepare students for various positions in the hospitality industry. What interests many prospective students in this field of study is the extraordinary range of management jobs available. In addition to operational management, graduates will be able to pursue careers in such areas as personnel, marketing, sales, finance, training, facilities management, conference management, and purchasing. Career progression is often very rapid, with companies offering very good financial and professional development packages in recognition of the major shortage of well qualified management graduates for what is one of the world's largest and fastest growing industries.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Relate customer expectations to the achievement of financial viability of the organization
2. Practice appropriate communication skills in operational and human resource management
3. Evaluate hospitality operations
4. Apply quality control systems to customer service issues
5. Apply the appropriate management/supervisory techniques to operational situations

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:
BUAD 66 * Business Communications 3
BUAD 80 Customer Service 3
CIS 1 Computer Literacy Workshop 3
CULA 50 Safety and Sanitation 2
CULA 55 Purchasing 2
CULA 73 Introduction to Wines OR 2
CULA $66 \quad$ Wine with Food

HOSP 10 Introduction to the Hospitality Industry 3
HOSP $20 \quad$ Hospitality Operations Management 3
HOSP 35 Computer Applications in the Hospitality Industry 3
HOSP $40 \quad$ Human Resource Mgmt. in the Hospitality Industry
HOSP 45 Restaurants, Hotels, and Lawful Management
HOSP $50 \quad$ Hospitality Marketing, Sales and Advertising
HOSP $60 \quad$ Hospitality and Financial Management
HOSP $65 \quad$ Hospitality Supervision
HOSP 94 Hospitality Worksite Learning
*May be used to fulfill General Education requirements.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 42 |
| Additional General Education | 18 |
| General Electives | 0 |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: This certificate is designed to prepare students for careers in the hospitality field associated with food and beverage management, lodging, and tourism. Hands-on worksite learning gives the student additional experience in the field.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Define the concept of service and train others to meet and exceed guest expectations, in any hospitality industry environment.
2. Define the main departments within a full-service hotel and their functions, and describe how each department works together to ensure the overall objective is met.
3. Describe computer applications commonly used in the hospitality industry.
4. Describe the nature of, and be able to effectively function in, this dynamic physically demanding environment.
5. Describe motivational techniques that management can employ to improve employee performance in a hospitality operation.

Continued on next page...

Hospitality Management - Hotel/Restaurant Management Concentration Certificate (continued):

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
www.shastacollege.edu/specs/hosp/hotelmanagecert/gainful-employment/.
CERTIFICATE REQUIREMENTS:

| BUAD 80 | Principles of Customer Service | 3 |
| :--- | :--- | :--- |
| HOSP 10 | Introduction to the Hospitality Industry | 3 |
| HOSP 20 | Hospitality Operations Management | 3 |
| HOSP 35 | Computer Applications in the Hospitality Industry | 3 |
| HOSP 40 | Human Resource Mgmt. in the Hospitality Industry | 3 |
| HOSP 94 | Hospitality Worksite Learning | 2 |
|  |  | $\mathbf{1 7}$ |

## Industrial Technology Certificate

## Certificate:

PROGRAM DESCRIPTION: The Industrial Technology Certificate is designed to provide employable knowledge and skills courses common to various industrial occupations for entry-level employment in diverse industries.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Explain the basic theory of the subject matter or industrial system for the course of instruction based on industry standards.
2. Analyze a scenario based upon an industrial equipment system failure/problem/complaint.
3. Employ a systematic approach to troubleshooting an industrial system malfunction and prepare an effective repair solution.
4. Analyze component failures to determine the root cause of the component failure.
5. Verify if the path of repair was correct by testing and/or completing a work order/report.
6. Demonstrate the correct usage of tools/supplies required to diagnose/ repair a malfunction

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

| CERTIFICATE REQUIREMENTS: |  |  |
| :--- | :--- | ---: |
| DIES 48 | Hydraulics | 3.5 |
| INDE 101 | Industrial Occupation Basics | 3 |
| INDE 138 | Fundamentals of Electronics and Electricity | 3 |
| MATH 100 | Technical Applications of Mathematics | 3 |
| WELD 70 | Beginning Welding | 3 |
|  |  |  |
|  | TOTAL UNITS FOR CERTIFICATE: | $\mathbf{1 5 . 5}$ |

## Life Management

## Certificate:

PROGRAM DESCRIPTION: This certificate is designed to provide students with the information, perceptions and skills necessary to move toward responsible independence and effective interpersonal relationships. Resources such as time money and energy will be stressed along with the study of the physical, mental emotional and social needs of all ages. This curriculum is essential for preparing individuals to balance personal, family and work responsibilities throughout the life cycle.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be capable of balancing personal, family and work responsibilities on a sustainable basis through the use of:

1. A comprehensive model of developmentally appropriate concepts and behavior throughout the lifespan.
2. A personal mission statement for life and set of initial life goals.
3. A theoretical perspective of family.
4. A personal dietary analysis and plan.
5. A personal budgetary analysis and plan.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## CERTIFICATE REQUIREMENTS:

All courses to be applied to the Life Management Certificate must be completed with a " $C$ " grade or better.
ECE 1 Human Development 3
FSS 16 Marriage and Family 3
FSS 25
FSS 46
FSS 60
Nutrition
3
3
Personal Finance
Life Management
TOTAL UNITS FOR CERTIFICATE

## Music

## Associate in Arts:

PROGRAM DESCRIPTION: The AA curriculum in Music is designed to provide preparation for either transfer to a CSU or UC as a music major and/or assist in development for a career in music within a variety of music career choices. A few of these career options could be: working in the music industry, music performance, music education, music publishing, musical theater, composition retail music merchandising, and private music instruction. Additionally the music curriculum creates an opportunity for local amateur and professional musicians to perform within the music department's music performance ensembles (Choirs, Orchestras, Symphonic Bands, and Jazz Ensembles) and/or to advance their music skills.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Explain and demonstrate the principles and rules of common four-part harmonic practice.
2. Attain a first-year college student level of piano competency.
3. Perform as a soloist at a first-year college student level of competency on a principal instrument or voice.
4. Analyze given score materials to identify stylistic differences within the common practice era.

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## Music Degree (continued):

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

Students must complete the courses required for the Certificate. In addition, students fulfill the 34-39 unit general education pattern for CSU or IGETC. NOTE Students planning to transfer to National Association of Schools of Music (NASM) accredited universities to complete a BA degree in Music, in addition to meeting the major requirements shown below, will be required to show proficiency in the following areas: theory, keyboard skills, vocal skills, music history/appreciation, and applied musicianship. Such students should successfully complete 4 units of Directed Independent Study/Music classes in addition to the major requirements listed below. Directed independent study classes are for full-time music majors and are for collegiate study on individual instruments or voice. Directed independent study requires permission of instructor to enroll.

CORE COURSES:
MUS 2
Diatonic Harmony and Musicianship
MUS 3 Diatonic Harmony and Musicianship
MUS 4 Chromatic Harmony
MUS 5 20th Century Harmony
RESTRICTED ELECTIVES: (Choose four units)
MUS $30 \quad$ Intermediate Voice (1)
MUS $31 \quad$ Chamber Choir (1)
MUS 33 Jazz Ensemble (1)
MUS $35 \quad$ Vocal Jazz Ensemble (1)
MUS $39 \quad$ Chamber Music (1)
MUS $40 \quad$ Concert Choir (1)
MUS 41 Shasta College Women's Ensemble (1)
MUS $42 \quad$ Shasta College Chorale (1)
MUS 43 Shasta College Symphony Orchestra (1)
MUS $44 \quad$ Shasta College Youth Symphony (.5-1)
MUS 46 Shasta College Symphonic Band (1)
MUS 47 Shasta College Jazz Ensemble (1)
RECOMMENDED ELECTIVE COURSES:
MUS 1 Music Fundamentals (pre-Music Major only)
MUS 10* Music Appreciation (valid for G.E.)
MUS 11* History of Jazz and Rock (valid for G.E.)
MUS 14* World Music
MUS $22 \quad$ Beginning Piano (pre-Music Major only)
MUS 29/30 Beginning/Intermediate Voice
MUS $61 \quad \begin{array}{ll}\text { Performance Analysis } \\ & \text { Directed Independent Study/Music }\end{array}$
Directed Independent Study/Music
*May be used to fulfill General Education requirements.

| ASSOCIATE IN ARTS DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 24 |
| Additional General Education | $34-39$ |
| General Electives | $\mathbf{0 - 2}$ |
| Degree Total | $\mathbf{6 0 - 6 3 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: The Certificate in Music is designed to provide preparation for development of career employment within a variety of music career choices. A few of these career options could be: working in the music industry, music performance, music publishing, musical theater, composition, and private music instruction. Additionally the music curriculum creates an opportunity for local amateur and professional musicians to perform within the music department's music performance ensembles (Choirs, Orchestras, Symphonic Bands, and Jazz Ensembles) and/or to advance their music skills.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Explain and demonstrate the principles and rules of common four-part harmonic practice.
2. Attain a first-year college student level of piano competency.
3. Perform as a soloist at a first-year college student level of competency on a principal instrument or voice.
4. Analyze given score materials to identify stylistic differences within the common practice era.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## CERTIFICATE REQUIREMENTS:

MUS 2 Diatonic Harmony and Musicianship 5
MUS 3 Diatonic Harmony and Musicianship 5
MUS 4 Chromatic Harmony
MUS $5 \quad$ 20th Century Harmony
RESTRICTED ELECTIVES: (Choose four units)
MUS 30 Intermediate Voice (1)
MUS $31 \quad$ Chamber Choir (1)
MUS 33 Jazz Ensemble (1)
MUS $35 \quad$ Vocal Jazz Ensemble (1)
MUS 39 Chamber Music (1)
MUS $40 \quad$ Concert Choir (1)
MUS $41 \quad$ Shasta College Women's Ensemble (1)
MUS $42 \quad$ Shasta College Chorale (1)
MUS $43 \quad$ Shasta College Symphony Orchestra (1)
MUS $44 \quad$ Shasta College Youth Symphony (.5-1)
MUS $46 \quad$ Shasta College Symphonic Band (1)
MUS 47 Shasta College Jazz Ensemble (1)
TOTAL UNITS FOR CERTIFICATE

## Nurse Aide/Home Health Aide

## Certificate:

PROGRAM DESCRIPTION: Curriculum for this course is designed to prepare a student to work in any one of several health care situations, (acute care hospital, long term care, and home care).

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate:

1. $90 \%$ of students taking the end of program comprehensive written and skills predictor examination will demonstrate competency by a written score of 75\% or higher and demonstrate competency on at least three of five randomly selected skills consistent with state certification testing competencies.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM

Students, at their expense, are required to meet all health and safety clinical requirements prior to entering the Nurse Aide/Home Health Aide course. Students must meet established physical criteria to participate in the clinical area. See program web page for specific information,
http://www.shastacollege.edu/HSUP/NA-HA/generalinformation

## CERTIFICATE REQUIREMENTS:

HEOC $180 \quad$ Nurse Aide/Home Health Aide 13

TOTAL UNITS FOR CERTIFICATE:

## Nursing - Associate Degree Nursing

## Associate in Science:

PROGRAM DESCRIPTION: The educational objective of the Associate in Science Degree Nursing program is to prepare the student who, upon graduation and successful completion of the NCLEX-RN, will be able to function within the scope of nursing as defined by the State of California Nursing Practice Act. Students must meet established physical criteria to participate in the clinical area.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree:

1. $90 \%$ of those students who are eligible to sit for the National Council Licensing Examination for Registered Nursing (NCLEX-RN) will pass their examination within the first six months of the first attempt.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

NOTE: All students participating in clinical rotations must submit proof of immunizations, TB clearance, and physical examination; pass a drug screening and a background check; and, have current certification in cardiopulmonary resuscitation (CPR) for the health professional according to established program process prior to going into clinical facilities. Students are financially responsible for meeting these requirements. See division/program web page at
http://www.shastacollege.edu/HSUP/REGN/ADNgeneralinfo or call Division Office (530-339-3600) for specific requirements, procedures, and deadlines.

## Graduation Requirements:

1. Completion of the Humanities requirement
2. Completion of competence in math (MATH 102 Inter. Algebra or MATH 110 Essential Math are the advised course for meeting this requirement)
3. Completion of the multi-cultural awareness requirement
4. Completion of computer literacy

Due to the time commitments of the A.D.N. program, it is strongly recommended to complete the graduation requirement before entering the program.

## REQUIREMENTS FOR ENROLLMENT IN THE PROGRAM:

Students filing enrollment packets must be a high school graduate or equivalent. The "Prerequisite Science" courses listed below must be completed with a grade of C or higher in each course and a minimum science 2.5 GPA. Prerequisites must be completed upon application. No in progress courses will be accepted.
PREREQUISITE COURSES:

| ANAT 1* | Anatomy | 5 |
| :--- | :--- | :--- |
| MICR 1* | ${ }^{* *}$ Microbiology | 5 |
| PHY 1* | Physiology (with lab) | 5 |

Students must complete the remaining "PREREQUISITE" courses listed below with a grade of " C " or better in each course.

| ENGL 1 A $^{*}$ | College Composition | 4 |
| :--- | :--- | :--- |
| ANTH 2* | Cultural Anthropology OR | 3 |
| SOC 1* | Introduction to Sociology OR |  |
| SOC 2* | Social Problems |  |


| PSYC 1A* | General Psychology OR | 3 |
| :--- | :--- | :--- |
| PSYC 14* | Understanding Human Behavior |  |


| CMST 10* | Interpersonal Communication OR | 3 |
| :--- | :--- | :--- |
| CMST 54* | Small Group Communication OR |  |
| CMST 60* | Public Speaking |  |

## TOTAL PREREQUISITE UNITS

* May be used to fulfill General Education Requirements. See a counselor.

DEGREE REQUIREMENTS:
Students must be enrolled into the ADN program. Students must then complete the courses listed below.

CORE COURSES:
REGN $1 \quad$ Theoretical Foundations of Nursing Care $\quad 6.5$
REGN $2 \quad$ Clinical Foundations of Nursing Care 5.5
REGN $10 \quad$ Theoretical Concepts Med/Surgical Nursing I $\quad 6.5$
REGN $11 \quad$ Clinical Concepts Med/Surgical Nursing I $\quad 4.5$
REGN 12 Assessment Concepts Med/Surgical Nursing $\quad 1$

REGN $20 \quad$ Theoretical Concepts Med/Surgical Nursing II 7
REGN 21 Clinical Concepts Med/Surgical Nursing II
REGN 33 Theoretical Concepts Med/Surgical Nursing III 5 5
6
6
REGN 34 Clinical Concepts Med/Surgical Nursing III TOTAL UNITS FOR CORE: 48

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major |  |
| Additional General Education | 6 |
| General Electives | 0 |
| Degree Total | $\mathbf{8 2 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

NOTE: In order to progress through the nursing courses, students must demonstrate competence in both the theory and clinical components. Failing or withdrawing from any one of the semester's corequisite courses requires withdrawal from all of that semester's corequisite courses.

The enrollment process for LVNs desiring to transition to RN has changed. For pertinent information go to www.shastacollege.edu/HSUP/REGN/Application or contact the Division at (530) 339-3606.

ENROLLMENT CRITERIA FOR THE 30-UNIT OPTION - NON DEGREE - LVN-RN PROGRAM:
LVNs may elect to take a non-degree program under the BRN regulation 1429-the 30 unit option. This consists of twenty (20) units of nursing and ten (10) units of related science. REGN 20X, REGN 21X, REGN 33X, and REGN 34X are the required 20 units of nursing. Microbiology and physiology are the required 10 units of science. Students must see nursing program director if considering this option

## Nursing - Vocational Nursing

## Certificate:

PROGRAM DESCRIPTION: This curriculum is designed to prepare selected individuals to provide nursing care requiring technical-manual skills under the supervision of a Registered Nurse or physician. Upon successful completion of the program, a student receives a Certificate of Completion and is eligible to take the NCLEX-PN for licensure as a Vocational Nurse. Students who have had previous education and experience in nursing will be given the opportunity to receive credit toward completion of the program.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate:

1. $90 \%$ of those students who are eligible to sit for the National Council Licensing Examination for Vocational Nurses (NCLEX-PN) will pass the examination within the first six months of the first attempt.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/cms.aspx?id=15021.

Space in the program is limited. A new class is enrolled every three semesters. In order to be eligible for enrollment, students must satisfy the prerequisites listed below file an enrollment packet with the Admissions Office during designated enrollment periods in each semester. All qualified applicants are placed on a waiting list and enrolled on a space available basis in the order of their accepted application date. For specific information, see the program web page at http://www.shastacollege.edu/HSUP/VOCN/VNgeneralinfo or call the Division Office at (530-339-3606).

Continued on next page....

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.

## Vocational Nursing Certificate (continued):

REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM:

1. Students must have a high school diploma or equivalent.
2. Students must be a current Certified Nurse Aide (CNA)
3. Students must complete the following prerequisite courses with a C grade or better.

| PREREQUISITE COURSES: |  |  |
| :--- | :--- | :--- |
| BIOL 5 | Introduction to Human Biology | 3 |
| BIOL 6 | Human Biology Lab | 1 |
| ECE 1 | Human Development | 3 |
| FSS 25 | Nutrition | 3 |
| PSYC 1A | General Psychology OR | 3 |
| PSYC 14 | Understanding Human Behavior |  |

TOTAL UNITS FOR PREREQUISITES

## CERTIFICATE REQUIREMENTS:

Students must be enrolled in the program in order to take the courses listed below Students, at their expense, are required to have a physical examination and immunizations prior to entering the program. Students must meet established physical criteria to participate in the clinical area, have a current Basic CPR card for the health professional, provide proof of drug testing, and completed a criminal background check. For specific information, see the program web page at www.shastacollege.edu/hsup or call the Division Office (530-339-3606).

NOTE: Students must show competence in both clinical and theory components (a grade of C or better) in order to progress through the curriculum. A failing clinical grade results in removal from the program regardless of the theory grade.

| VOCN 160 <br> VOCN 161 <br> VOCN 162 | Foundations of Nursing Practic <br>  |
| :--- | :--- |
|  | Nursing of Adults |
| Nursing of Adults and Children |  |
|  | TOTAL UNITS FOR CERTIFICAT |
| RECOMMENDED COURSES (Not required): |  |
| ENGL 190 | Reading and Writing II |
| MATH 220 | Basic Mathematics |
| OAS 110 | Beginning Medical Terminology |

## Office Administration - <br> Administrative Office Assistant

## Certificate:

PROGRAM DESCRIPTION: This certificate prepares you to be an entry level Administrative Assistant. Administrative Assistants work for supervisors, managers, and executives. Skills learned: Document and Data Handling: How to prepare, modify, and proofread documents such as reports, letters, memos, records, lists, and schedules. Technology: Working knowledge of Microsoft Office: Word, Excel, Internet Explorer, and Outlook. Type 35-40 words per minute. Interpersonal: Meet and greet clients and visitors, maintain a pleasant manner, and project a professional image in person and on the phone. Confidential: Handling of mail, money, and receipts. General: Research and price office furniture and supplies with attention to detail. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Define ethical office behavior.
2. Define gracious and efficient behavior with office visitors using appropriate customer service skills.
3. Schedule appointments including the use of electronic calendaring.
4. Organize files and folders electronically.
5. Prepare notices, agendas, and minutes for meetings.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/oas/gainful employment/.

## CERTIFICATE REQUIREMENTS:

| BUAD 166 | Business English | 3 |
| :--- | :--- | ---: |
| CIS 1 | Computer Literacy Workshop | 3 |
| OAS 10 | Excel for Windows - I | 1 |
| OAS 51 | Introduction to Keyboarding and Word | 3 |
| OAS 64 | Computerized 10-Key | 0.5 |
| OAS 80 | Outlook | 1 |
| OAS 152 | Keyboarding for Speed and Accuracy | 0.5 |
| OAS 157 | Office Procedures | 3 |
| OAS 158 | Medical Office Procedures |  |

TOTAL UNITS FOR CERTIFICATE 15

## Office Administration Administrative Office Professional

## Associate in Science:

PROGRAM DESCRIPTION: This degree prepares you to be an advanced-level Administrative Assistant. Administrative Assistants work for supervisors, managers, and executives. Skills learned: Document and Data Handling: How to prepare, modify, and proofread documents such as reports, letters, memos, records, lists, and schedules. Technology: Advanced knowledge of Microsoft Office: Word, Excel, and Outlook. Setup and coordinate meetings and conferences using Outlook Intermediate knowledge of Microsoft Office: PowerPoint, Internet Explorer, and Access. Incorporate computer graphics in documents, in addition to computer based filing methods and procedures. Type 50-55 words per minute. Interpersonal: Meet and greet clients and visitors, maintain a pleasant manner, and project a professional image in person and on the phone. Confidential: Handling of mail, money, and receipts, and record keeping. General: Research and price office furniture and supplies with attention to detail. Sales concepts, including markups, discounts, insurance, and depreciation, scheduling and reporting duties, coordinate and maintain records for staff. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Operate the alphabetic, numeric, and symbol keys by touch with proper typing technique.
2. Type for 5 minutes at a minimum net speed of 50 words a minute with five errors or less.
3. Expand and apply knowledge of Microsoft Word to complete business documents.
4. Increase abilities related to formatting business letters, memos, tables, mail merge, and reports including employment documents.
5. Answer, with at least 70 percent accuracy, questions on objective tests covering technical information

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:
ACCT 101 Basic Accounting I 3
ACCT 103 PC Accounting 2
BUAD 45 * Human Relations on the Job 3
BUAD 66* Business Communications 3
BUAD 106 Business Mathematics 3
BUAD 166 Business English 3
CIS 1 Computer Literacy Workshop 3
CIS 20 Access for Windows I
OAS 10 Excel for Windows
OAS 11 Excel for Windows II
OAS 51 Introduction to Keyboarding and Word
Continued on next page..

Office Administration - Administrative Office Professional Degree (continued):
OAS 52 Intermediate Keyboarding and Word 3
OAS 53 Advanced Keyboarding and Word 3
OAS 64 Computerized Ten-Key 0.5
OAS 80 Outlook
OAS $92 \quad$ Word for Windows II
OAS $94 \quad$ PowerPoint
OAS 152 Keyboarding for Speed and Accuracy
OAS 157 Office Procedures
OAS 166 Records Management
OAS 171 Proofreading Skills
RECOMMENDED COURSES (not required):
CIS 83 Web Design Using Dreamweaver
OAS 12 Excel for Windows III
OAS 93* Word for Windows III
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 43 |
| Additional General Education | 15 |
| General Electives | $\mathbf{2}$ |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: This certificate prepares you to be an intermediatelevel Administrative Assistant. Administrative Assistants work for supervisors, managers, and executives. Skills learned: Document and Data Handling: How to prepare, modify, and proofread documents such as reports, letters, memos, records, lists, and schedules. Technology: Working knowledge of Microsoft Office: Word, Excel, PowerPoint, Internet Explorer, Access, and Outlook. Incorporate computer graphics into documents, in addition to computer based filing methods and procedures. Type 45-50 words per minute. Interpersonal: Meet and greet clients and visitors, maintain a pleasant manner, and project a professional image in person and on the phone. Confidential: Handling of mail, money, and receipts, and record keeping. General: Research and price office furniture and supplies with attention to detail. Scheduling and reporting duties. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Type for 5 minutes at a minimum speed of 40 words per minute with five errors or less.
2. Proofread typed work, mark and count errors, and compute speed.
3. Establish folders (directories) and subfolders (sub-directories) for information management.
4. Increase abilities related to formatting business letters, memos, tables, mail merge, and reports including employment documents.
5. Anders, with at least 70 percent accuracy, questions on objective tests covering technical information.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/oas/gainful employment/

| CERTIFICATE REQUIREMENTS: |  |  |
| :--- | :--- | :--- |
| ACCT 101 | Basic Accounting | 3 |
| BUAD 45 | Human Relations on the Job | 3 |
| BUAD 166 | Business English | 3 |
| CIS 1 | Computer Literacy Workshop | 3 |
| CIS 20 | Access for Windows-I | 1 |
| OAS 10 | Excel for Windows-I | 1 |
| OAS 11 | Excel for Windows-II | 1 |
| OAS 51 | Introduction to Keyboarding and Word | 3 |
| OAS 52 | Intermediate Keyboarding and Word | 3 |
| OAS 64 | Computerized Ten Key | 0.5 |
| OAS 80 | Outlook | 1 |
| OAS 92 | Word for Windows II | 1 |
| OAS 94 | PowerPoint | 1 |
| OAS 152 | Keyboarding for Speed and Accuracy | .5 |
| OAS 157 | Office Procedures | 3 |
| OAS 166 | Records Management | 2 |
| OAS 171 | Proofreading | 2 |


| RECOMMENDED COURSES (not required): |  |
| :--- | :--- |
| OAS 12 | Excel for Windows III |

## Office Administration -

## Health Information Management

## Associate in Science:

PROGRAM DESCRIPTION: This curriculum is designed to prepare the individual with clerical medical office skills for entry-level employment in physicians' offices, health care facilities, clinics, laboratories, health and accident insurance companies, with related clerical duties essential to medical office assisting. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Analyze a medical case study utilizing principles of medical terminology, medical coding, and account billing
2. Select and assign the appropriate CPT (Current Procedural Terminology) or HCPCS (Healthcare Common Procedure System) code(s).
3. Differentiate among the payer requirements based on the patient's status, the medical diagnosis(es), and the services/procedures performed.
4. Apply appropriate principles for claims processing and completion.
5. Explain the reimbursement issues and practice using appropriate terminology.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## DEGREE REQUIREMENTS:

CORE COURSES:

| BUAD 45* | Human Relations on the Job | 3 |
| :--- | :--- | ---: |
| BUAD $66^{*}$ | Business Communications | 3 |
| BUAD 166 | Business English | 3 |
| CIS 1 | Computer Literacy Workshop | 3 |
| OAS 10 | Excel I | 1 |
| OAS 51 | Introduction to Keyboarding and Word | 3 |
| OAS 52 | Intermediate Keyboarding and Word | 3 |
| OAS 64 | Computerized Ten-Key | 0.5 |
| OAS 80 | Outlook | 1 |
| OAS 110 | Beginning Medical Terminology | 3 |
| OAS 111 | Advanced Medical Terminology | 3 |
| OAS 112 | Basic ICD-9-CM and CPT-4 Coding | 3 |
| OAS 113 | Advanced Medical Coding | 3 |
| OAS 114 | Healthcare Billing and Reimbursement | 3 |
| OAS 150 | Computerized Medical Account Management | 3 |
| OAS 152 | Keyboarding for Speed and Accuracy | .5 |
| OAS 158 | Medical Office Procedures | 3 |
| OAS 160 | Medical Transcription | 3 |
| OAS 166 | Records Management | 2 |
| OAS 171 | Proofreading Skills | 2 |
| Continued on next page... |  |  |

BUAD 66 * Business Communication

OAS $110 \quad$ Beginning Medical Terminology
Advanced Medical Terminology
OAS 113 Advanced Medical Coding
OAS 114 Healthcare Billing and Reimbursement
Computerized Medical Account Management
OAS 152 Keyboarding for Speed and Accuracy
OAS 158 Medical Office Procedures
OAS 166 Reical Manscripen
OAS $171 \quad$ Proofreading Skills
2

Office Administration - Health Information Management Degree (continued):
RECOMMENDED COURSES (not required):

| OAS 11 | Excel for Windows II | 1 |
| :--- | :--- | :--- |
| OAS 53 | Advanced Keyboarding and Word | 3 |
| OAS 92 | Werd for Windows II |  |

OAS 92 Word for Windows II 1
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 49 |
| Additional General Education | 15 |
| General Electives | 0 |
| Degree Total | $\mathbf{6 4 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: This program is designed to prepare the student for an entry-level position in the medical office. Skills learned: prepare claims for health care facilities, clinics, physicians' offices, medical equipment companies, medical billing service companies, transcription, and record management. Upon completion of this program, the graduate should have the necessary knowledge and skills to secure employment in either the medical provider or health career sectors. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Identify the structure of the current coding methodologies/diagnosis and procedures.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/oas/gainful employment/.

## CERTIFICATE REQUIREMENTS:

| BUAD 166 | Business English | 3 |
| :--- | :--- | ---: |
| CIS 1 | Computer Literacy Workshop | 3 |
| OAS 10 | Excel for Windows I | 1 |
| OAS 51 | Introduction to Keyboarding and Word | 3 |
| OAS 52 | Intermediate Keyboarding and Word | 3 |
| OAS 64 | Computerized 10-Key | .5 |
| OAS 80 | Outlook | 1 |
| OAS 110 | Beginning Medical Terminology | 3 |
| OAS 112 | Basic ICD-9-CM and CPT-4 Coding | 3 |
| OAS 150 | Computerized Medical Account Management | 3 |
| OAS 152 | Keyboarding for Speed and Accuracy | .5 |
| OAS 158 | Medical Office Procedures |  |
| OAS 160 | Medical Transcription | 3 |
| OAS 166 | Records Management | 3 |
| OAS 171 | Proofreading Skills | 2 |
|  |  | 2 |
|  |  |  |
|  | TOTAL UNITS FOR CERTIFICATE | 34 |
| RECOMMENDED COURSES (not required): |  |  |
| OAS 11 | Excel for Windows II | 1 |
| OAS 53 | Advanced Keyboarding and Word | 3 |
| OAS 92 | Word for Windows II | 1 |

## Retail Management

## Certificate:

PROGRAM DESCRIPTION: This program is designed to enable students to find entry-level positions in the retail selling areas as sales personnel.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
2. Recognize, acknowledge and apply the functions and responsibilities of retail management.
3. Develop and apply a business retailing strategy leading to a business plan.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait/buad/gainful employment/.

## REQUIREMENTS FOR CERTIFICATE

ACCT 101 Basic Accounting
BUAD 41 Leadership and Supervision
BUAD 45 Human Relations on the Job
BUAD 66 Business Communications
BUAD $77 \quad$ Principles of Marketing
BUAD $91 \quad$ Principles of Management
BUAD 106 Business Mathematics
BUAD 176 Retail Management
CIS 1
interpersonal Communication
TOTAL UNITS FOR CERTIFICATE:

## Theatre Arts

## Associate in Arts:

PROGRAM DESCRIPTION: The Theatre Arts program is academically grounded in the liberal arts tradition of literature, performance, cultural studies, history, philosophy, and technical skills. It also provides a hands-on, learn-by-doing environment that gives students experiences and skills to complement many career paths. Employers find theatre trained applicants become valuable employees because they have developed excellent communication and problem-solving skills, confidence, and the ability to work cooperatively with a diverse team of people.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Describe the basic elements of dramatic structure and analyze the dramatic components in a theatrical production.
2. Select appropriate monologues and prepare them as audition pieces.
3. Investigate the themes and dramaturgy of the Greek, Roman, Medieval, Renaissance, Elizabethan, Jacobean and Restoration periods of theater history and compare and contrast those periods through discussion, papers, and performance analysis.
4. Identify and apply the major components of stagecraft in the implementation of scenery, lighting, costume, make-up, special effects, and production management.
5. Investigate the social, political, and spiritual objectives of theatrical performance through discussions and papers that deal with gender, politics and religion.

Continued on next page..

Theatre Arts Degree (continued):
FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

DEGREE REQUIREMENTS:
CORE COURSES:

| THTR 1* | Introduction to Theatre Arts | 3 |
| :--- | :--- | :--- |
| THTR 8* | Theatre History I | 3 |
| THTR 12 | Acting for the Stage I | 3 |
| THTR 23/26 | Mainstage Production I/II OR | 3 |
| THTR 70 | Repertory Theatre I |  |
| THTR 30 | Stagecraft I | 3 |
| THTR 41 | Theatre Laboratory OR | 3 |
| THTR 74 | Repertory Theatre - Technical |  |

RESTRICTED ELECTIVES IN THEORY: (Choose six units)
THTR 5* 20th Century Theatre (3)
THTR 9* Theatre History II (3)
THTR $13 \quad$ Acting for the Stage II (2)
THTR $29 \quad$ Directing (2)
THTR $31 \quad$ Stagecraft II (3)
THTR $34 \quad$ Makeup (2)
THTR $37 \quad$ Theatre Management (2)
THTR $81 \quad$ Introduction to Playwriting (3)
RESTRICTED ELECTIVES IN PRACTICUM: (Choose four units)
THTR 24 Mainstage Production II - Music (1-4)
THTR $25 \quad$ Mainstage Production II - Choreography (1-4)
THTR 42 Stage Production Laboratory (.5-4)
THTR 60 Special Projects-Production (1-4)
THTR $61 \quad$ Costuming Laboratory (1-3)
THTR $70 \quad$ Repertory Theatre I (1-4)
THTR $74 \quad$ Repertory Theatre - Technical (1-4)
THTR $97 \quad$ Special Studio Topics: Theatre (1-3)
THTR 98 Special Topics: Theatre (1-3)
*May be used to fulfill General Education requirements. See a counselor.

| $\quad$ ASSOCIATE IN ARTS DEGREE REQUIREMENTS: |  |
| :--- | :--- |
| Major | 27 |
| Additional General Education | 18 |
| General Electives | 15 |
| Degree Total | $\mathbf{6 0 *}$ |
|  |  |
|  |  |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: The Theatre Arts program is academically grounded in the liberal arts tradition of literature, performance, cultural studies, history, philosophy, and technical skills. It also provides a hands-on, learn-by-doing environment that gives students experiences and skills to complement many career paths. Employers find theatre trained applicants become valuable employees because they have developed excellent communication and problem-solving skills, confidence, and the ability to work cooperatively with a diverse team of people.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Describe the basic elements of dramatic structure and analyze the dramatic components in a theatrical production.
2. Select appropriate monologues and prepare them as audition pieces.
3. Investigate the themes and dramaturgy of the Greek, Roman, Medieval, Renaissance, Elizabethan, Jacobean and Restoration periods of theater history and compare and contrast those periods through discussion, papers, and performance analysis.
4. Identify and apply the major components of stagecraft in the implementation of scenery, lighting, costume, make-up, special effects, and production management.
5. Investigate the social, political, and spiritual objectives of theatrical performance through discussions and papers that deal with gender, politics and religion.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## CERTIFICATE REQUIREMENTS:

CORE COURSES:

| THTR 1* | Introduction to Theatre Arts | 3 |
| :--- | :--- | :--- |
| THTR 8* | Theatre History I | 3 |
| THTR 12 | Acting for the Stage I | 2 |
| THTR 23/26 | Mainstage Production I/II OR | 3 |
| THTR 70 | Repertory Theatre I |  |
| THTR 30 | Stagecraft I | 3 |
| THTR 41 | Theatre Laboratory OR | 3 |
| THTR 74 | Repertory Theatre - Technical |  |

RESTRICTED ELECTIVES IN THEORY: (Choose six units) 6
THTR 5* 20th Century Theatre (3)
THTR 9* Theatre History II (3)
THTR $13 \quad$ Acting for the Stage II (2)
THTR $29 \quad$ Directing (2)
THTR $31 \quad$ Stagecraft II (3)
THTR $34 \quad$ Makeup (2)
THTR $37 \quad$ Theatre Management (2)
THTR 81 Introduction to Playwriting (3)
RESTRICTED ELECTIVES IN PRACTICUM: (Choose four units) 4
THTR 24 Mainstage Production II - Music (1-4)
THTR $25 \quad$ Mainstage Production II - Choreography (1-4)
THTR 42 Stage Production Laboratory (.5-4)
THTR $60 \quad$ Special Projects-Production (1-4)
THTR $61 \quad$ Costuming Laboratory (1-3)
THTR 70 Repertory Theatre I (1-4)
THTR $74 \quad$ Repertory Theatre - Technical (1-4)
THTR $97 \quad$ Special Studio Topics: Theatre (1-3)
THTR 98 Special Topics: Theatre (1-3)

TOTAL UNITS FOR CERTIFICATE
*May be used to fulfill General Education requirements. See a counselor.

## Transition Certificate for Students with Disabilities

## Certificate:

PROGRAM DESCRIPTION: This curriculum is designed to provide an integrated educational option for students transitioning to post-secondary educational settings.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Approximately $70 \%$ of students should be able to use a word processor, find information on the Internet, and create a PowerPoint presentation.
2. Approximately $70 \%$ of students will be ready to enter regular college math classes such as MATH 220 or MATH 240.
3. Approximately $70 \%$ of students will be ready to enter non-adaptive college English classes such as ENGL 260 or 270.
4. Approximately $70 \%$ of students will have identified a career path.
5. Students will acquire the knowledge necessary to select relevant occupational opportunities and job search skills. Approximately $70 \%$ of students will demonstrate the ability to find job postings, complete job applications, write a resume and prepare for job interviews.
6. Students will know how to access relevant community and governmental resources. Approximately $70 \%$ of students will be able to identify at least four or more community organizations, or state agencies that provide support services for students with disabilities.

Continued on next page...

Transitions Certificate for Students with Disabilities (continued):
FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

## CERTIFICATE REQUIREMENTS:

| ADAP 210 | Career Planning and Development | 1 |
| :---: | :---: | :---: |
| ADAP 254 | Adapted Computer Skills (two semesters) | 2 |
| ADAP 255 | Human Awareness and Life Skills | 2 |
| ADAP 256 OR | Reading/Writing for Life Skills (2 semesters) (4) | 4-5 |
| ADAP 256 | Reading \& Writing for Life Skills (2) |  |
| AND |  |  |
| ENGL 260 | Elements of Reading (3) |  |
| ADAP 258 OR | Mathematics for Life Skills (2 semesters) (4) | 4-5 |
| ADAP 258 | Mathematics for Life Skills (2) |  |
| AND |  |  |
| MATH 220 | Basic Math (3) |  |


| TOTAL UNITS FOR CERTIFICATE | 13 - 15 |
| :---: | :---: |

## Watershed Restoration Certificate

## Certificate:

PROGRAM DESCRIPTION: This certificate provides full-time students as well as professionals related to various agencies and industries an opportunity to obtain knowledge, skills and hands-on training related to the many facets of watershed restoration including regulation, mapping, water quality, data collections, recent advances in erosion control and bio-engineering applications and techniques, and heavy equipment operations.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Apply the newest technologies and practices in erosion control in restoring an ecosystem
2. Apply the latest techniques in bio-engineering applications
3. Select and implement an appropriate method or procedure for monitoring a specific attribute of the environment.
4. Operate and maintain heavy equipment resulting in minimum impact to the watershed.
5. Accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/nr/gainful employment/.

## CERTIFICATE REQUIREMENTS:

| AGNR 50 | Natural Resources Measurements | 4 |
| :--- | :--- | :---: |
| AGNR 64 | Watershed Management and Ecology | 3 |
| AGNR 66 | Watershed Restoration | 1 |
| CONS 46 | Equipment Operations and Maintenance | 3 |
| CONS 47 | Project Construction for Equipment Operations | 3 |
|  |  | $\mathbf{1 4}$ |

## Water/Wastewater Treatment

## Certificate:

PROGRAM DESCRIPTION: This program is designed to provide entry-level training and upgrading for California water and wastewater public and private agency operators. A student seeking introduction into either water or wastewater fields would benefit by taking the entire course offerings. It is strongly recommended that students complete MATH 101-Basic Algebra and CHEM 2AIntroduction to Chemistry before completing the requirements of the program.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Assess existing methods in water and wastewater treatment technology.
2. Analyze treatment plant's relationship and responsibility to the community.
3. Evaluate the processes of coagulation, flocculation, sedimentation, filtration, disinfection, and distribution in water treatment.
4. Evaluate the processes of primary sedimentation, oxidation, disinfection, and disposal in wastewater treatment.

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait/wtt/gainful employment/.

## CERTIFICATE REQUIREMENTS:

WTT 177 Introduction to Wastewater Treatment 3 WTT 180 Introduction to Water Treatment Tech 3 WTT 181 Treatmen WTT Intermediate Water Treatment Tech Intermediate Wastewater Treatment WTT 184 Small Water Systems and Distribution WTT 186 Advanced Wastewater Treatment

TOTAL UNITS FOR CERTIFICATE

## Welding Technology

## Associate in Science:

PROGRAM DESCRIPTION: The Welding Technology Program is designed to prepare students for positions in a variety of trades or service industries requiring technically trained and/or certified welders. The program is designed to prepare students for the opportunity to become certified welders under the standards set by the American Welding Society. Students can receive their certification by the American Welding Society in a variety of processes as part of the instructional program. The program is available in two formats:

- Associate in Science Degree in Welding Technology
- Certificate from Shasta College in Welding Technology
- Certification by the American Welding Society as a certified welder

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Demonstrate competencies in job safety skills and awareness of workplace hazards.
2. Follow written and oral instructions in the interpretation of simple drawings and sketches, including welding symbols and the execution of the fabrication process.
3. Set up, maintain, and adjust welding related equipment.
4. Acquire skills and knowledge to make a successful transition to an entry-level position in the work force.
5. Pass workmanship tests using common welding processes.

Continued on next page..

## Welding Technology Degree (continued):

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

DEGREE REQUIREMENTS:
CORE COURSES:

| DIES 48 | Hydraulics | 3.5 |
| :--- | :--- | ---: |
| ENGL 1A* | College Composition | 4 |
| ENGR 118 | Blueprint and Specification Reading (Mechanical) | 2 |
| INDE 1 | Career Planning for Industrial Technology | 1 |
| MATH 110* | Essential Math | 3 |
| WELD 70 | Beginning Welding | 3 |
| WELD 73 | Structural Steel Metal Fabrication | 3 |
| WELD 170 | Introduction to ARC Welding | 3 |
| WELD 171 | Intermediate ARC Welding | 3 |
| WELD 174 | Structural Steel MIG Welding | 3 |
| WELD 175 | TIG Welding | 3 |
| WELD 178 | Pipe Welding Fundamentals | 3 |
| WELD 182 | Advanced ARC Welding | 1 |
| WELD 184 | Advanced GTAW (TIG) Welding | 1 |
| WELD 186 | Advanced Pipe Welding | 2 |
| WELD 188 | Advanced GMAW (MIG) Welding | 1 |

*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 39.5 |
| Additional General Education | 15 |
| General Electives | 5.5 |
| Degree Total | $\mathbf{6 0 *}$ |

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

## Certificate:

PROGRAM DESCRIPTION: The Welding Technology Program is designed to prepare students for positions in a variety of trades or service industries requiring technically trained and/or certified welders. The program is designed to prepare students for the opportunity to become certified welders under the standards set by the American Welding Society. Students can receive their certification by the American Welding Society in a variety of processes as part of the instructional program.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

## PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Demonstrate competencies in job safety skills and awareness of workplace hazards.
2. Follow written and oral instructions in the interpretation of simple drawings and sketches, including welding symbols and the execution of the fabrication process.
3. Set up, maintain, and adjust welding related equipment.
4. Acquire skills and knowledge to make a successful transition to an entry-level position in the work force
5. Pass workmanship tests using common welding processes

FINANCIAL AID INFORMATION: For information on BOGW and Title IV eligibility, check with the Financial Aid Office at (530) 242-7700.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at
http://www.shastacollege.edu/bait/weld/gainful employment/.

CERTIFICATE REQUIREMENTS:

| ENGR 118 | Blueprint \& Specification Reading | 2 |
| :--- | :--- | :--- |
| WELD 70 | Beginning Welding | 3 |
| WELD 73 | Structural Steel Metal Fabrication | 3 |
| WELD 170 | Introduction to ARC Welding | 3 |
| WELD 171 | Intermediate ARC Welding | 3 |
| WELD 174 | Structural Steel MIG Welding | 3 |
| WELD 175 | TIG Welding | 3 |
| WELD 178 | Pipe Welding Fundamentals | 3 |
| WELD 182 | Advanced ARC Welding | 1 |
| WELD 184 | Advanced GTAW (TIG) Welding | 1 |
| WELD 186 | Advanced Pipe Welding | 2 |
| WELD 188 | Advanced GMAW (MIG) Welding | 1 |
|  |  | $\mathbf{2 8}$ |

## REQUIREMENTS FOR AMERICAN WELDING SOCIETY CERTIFICATION:

In order to become certified by the American Welding Society, the following courses are offered for the student to increase his/her skill and knowledge. Certification by the American Welding Society is dependent upon the meeting of criteria as determined by the certified welding inspector. The completion of these courses is recommended, but does not guarantee certification by the American Welding Society.

WELD 182 Advanced ARC Welding $\quad 1$
WELD 184 Advanced GTAW (TIG) Welding 1
WELD 186 Advanced Pipe Welding 2
WELD 188 Advanced GMAW (MIG) Welding 1

## Chapter 6 - Course Descriptions

## ACCOUNTING (ACCT) <br> See Also: BUAD, CIS, MKTG, OAS

ACCT 2 INTRODUCTION TO FINANCIAL ACCOUNTING - 3 Units Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is the study of accounting as an information system, examining why it is important and how it is used by investors and creditors to make decisions. The course coverage includes the accounting information system and the recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, classified financial statements, and financial statement analysis. It also includes issues related to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics. This course may be offered in a distance education format.

ACCT 4 INTRODUCTION TO MANAGERIAL ACCOUNTING - 3 Units
Prerequisite: A grade of C or higher in ACCT 2 (CAN BUS 2)
Advisory: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is the study of the use and reporting of accounting data for managerial planning, cost control, and decision making purposes. The course includes broad coverage of concepts, classifications, and behaviors of costs. Topics include cost systems, the analysis and use of cost information, cost-volume-profit analysis, contribution margin, profit planning, standard costs, relevant costs, and capital budgeting. This course may be offered in a distance education format.

ACCT 97 SPECIAL TOPICS IN ACCOUNTING - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in accounting. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ACCT 98 SPECIAL LAB TOPICS IN ACCOUNTING - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing topics/knowledge in accounting. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ACCT 101 BASIC ACCOUNTING I - 3 Units

Class Hours: 54 lecture/18 lab total (when offered in the Distance Education format, hours will total 180)
A beginning course based on the double-entry bookkeeping system with an emphasis on a procedural approach. Topics include: accrual, cash, and modified cash basis of accounting; the accounting cycle, transaction analysis (rules of debits and credits), journalizing, posting, worksheets, preparation of financial statements, adjusting, closing, and reversing entries; combination journal; petty cash; bank reconciliations; special journals, accounts receivable, accounts payable; and basic payroll procedures. The course culminates with the student keeping a set of books using special journals for a small merchandising sole proprietorship for the last month of the fiscal year. This course is not transferable to a four-year college or university. This course may be offered in a distance education format.

## ACCT 102 BASIC ACCOUNTING II - 3 Units

Prerequisite: A grade of C or higher in ACCT 101 or ACCT 2
Class Hours: 54 lecture/18 lab total (when offered in the Distance Education format, hours will total 180)
A continuation of ACCT 101 maintaining the procedural approach. Topics include: accounting for notes payable, notes receivable, inventories, fixed assets, partnerships, corporations, long-term debt, and cash flows. The course culminates with the student keeping a manual set of books for a small merchandising partnership for the last month of the fiscal year. This course is not transferable to a four-year college or university. This course may be offered in a distance education format.

ACCT 103 PC ACCOUNTING - 2 Units
Prerequisite: A grade of C or higher in ACCT 101 or ACCT 2
Advisory: Ability to type 25 wpm strongly recommended
Class Hours: 18 lecture/ 54 lab total (when offered in the Distance Education format, hours will total 108)
Accounting on microcomputers emphasizes the major areas of a computerized accounting system. This course provides the student with hands-on opportunity to determine procedure, analyze transaction, enter data and print reports and financial statements related to the General Ledger, Depreciation, Accounts Receivable, Accounts Payable, Payroll, Financial Statement Analysis and Inventory Control. This course may be offered in a distance education format.

## ACCT 104 PAYROLL ACCOUNTING - 2 Units

Prerequisite: A grade of C or higher in ACCT 101 or ACCT 2; and BUAD 106 or Math Placement Level 3 or higher
Advisory: A grade of C or higher in OAS 64
Class Hours: 36 lecture/18 lab total (when offered in the Distance Education format, hours will total 126)
Payroll Accounting emphasizes the methods of computing wages and salaries, the methods of keeping records, and the preparation of government reports. This course is designed to provide training in the complexities of payroll accounting for vocational purposes. This course may be offered in a distance education format.

## ACCT 194 INCOME TAX - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A basic course in income tax law intended to acquaint students with provisions of State and Federal Income Tax Law. It is designed for individuals or the small business owner wanting to become better acquainted with the handling and processing of income tax returns and recent tax laws and developments. This course may be offered in a distance education format.

## ADAPTIVE STUDIES (ADAP)

## ADAP 100 COLLEGE SUCCESS FOR STUDENTS WITH DISABILITIES 3 Units (formerly SPED 100)

## Grading: Pass/No Pass Option

Advisory: English Placement Level 2 or higher
Class Hours: 54 lecture total
Introduction and practice of college study skills and techniques to enhance student success. Emphasis of this course will be on self assessment for the student who has a disability, as well as information dissemination. Topics to be discussed will include study skills, college support services and programs, disability awareness, personal goals, the college experience, and career exploration. Discussion will also include legal aspects of disability.

## ADAP 102 ORIENTATION TO COLLEGE - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total
An orientation to college that is tailored to the unique needs of students with disabilities. Introduction of educational programs, student services, and learning resources, along with full orientation to Disabled Students Programs and Services is covered. The laws and policies guiding the inclusion of students with disabilities in post-secondary education will be covered. In the one-unit format, students will complete formal educational plans and explore options for transfer education or job placement. This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ADAP 200 PREPARATION FOR COLLEGE - 3 Units

Grading: Pass/No Pass Option
Advisory: English Placement Level 2 or higher
Class Hours: 36 lecture/54 lab total
Introduction and orientation to college including completion of all applications and forms, thorough review of college catalog, college services, and student rights and responsibilities. Emphasis of this course will be on self-assessment for the student who has a disability including learning styles, personal strengths and weaknesses, and goal-setting. Additional topics to be discussed will include legal aspects of disability in college and work settings, reasonable accommodations and strategies for success, disability awareness, and college visitation. This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ADAP 210 CAREER PLANNING AND DEVELOPMENT - 1 Unit Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course is designed as a career development and planning option for transitioning students who have disabilities. The content of the course is designed
to assist students in the processes of 1) Finding a career that coincides with their individual interests and talents, 2) Matching personality assets to career characteristics, 3) Training in the researching of career choices and employment opportunities, 4) Matching vocational skills to career choices, 5) Developing and initiating an education/career plan consisting of goals and options, 6) Identifying educational opportunities available to attain career goals, 7) Identifying the impact of paid work upon SSI and SSDI.

ADAP 240 ADAPTIVE DRAWING AND PAINTING - 1-2 Units (formerly SPED 240/240AD)
Grading: Pass/No Pass Option
Class Hours: 54-108 lab total
A beginning to intermediate course exploring basic drawing, painting and expressive art techniques. This course will provide an introduction to basic art mediums such as: colored pens and pencils, graphite, pastels, ink, mixed media, watercolor and/or acrylics. It is designed to meet the developmental/intra-individual needs of learning disabled students and/or those with adaptive needs. Note: This class may be repeated three times for a total of four enrollments since course content varies and supervised repetition and practice enhance skills. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ADAP 253 ADAPTED MICROCOMPUTER KEYBOARDING - 1 Unit <br> (formerly OAS 254, MIS 251, MIS 251AB, BUSI 251AB)

Grading: Pass/No Pass Option
Class Hours: 54 lab total
A personal-use individualized course in keyboarding designed to meet the needs of students with disabilities. Interested students must be interviewed by a DSPS counselor and/or the instructor to determine if the course is appropriate for the student's abilities and interests. The course is designed to provide the intensive drill necessary to master the alphabetic keys as well as numbers and symbols of the microcomputer keyboard. A beginning class intended for students needing a computer terminal keyboarding skill who have had no previous typing experience. Students will be required to access software and key in data. Includes speed and accuracy development. This course may introduce document production if keyboard is mastered by touch. This class does not meet the requirement of Keyboarding I (Beginning Typing) for an Associate in Arts degree or certificate. Note: This course may be repeated in compliance with Title 5 regulations. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ADAP 254 ADAPTED COMPUTER SKILLS - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 54 lab total
Adapted Computer Skills is recommended for students requiring remedial instruction in using computers whether through standard platforms or assistive technology. Skills covered include the use of email, Internet access, and the use of MS Office software to apply in personal and academic interactions. Note: This course may be repeated in compliance with Title 5 regulations. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ADAP 255 HUMAN AWARENESS AND LIFE SKILLS - 2 Units (formerly SPED 255)

Grading: Pass/No Pass Option
Class Hours: 27 lecture/27 lab total
This course is being provided as a more focused curricular offering in interpersonal, sexuality, and life skills for students with disabilities. The aim of this course is to prepare students to tackle the rights as well as the responsibilities of life and to assist individuals to achieve an interdependent balance that is essential in order to enjoy a meaningful quality of life. The course will cover several related areas of the domestic domain 1) Self-awareness/self-esteem, 2) Health, hygiene, and nutrition, 3) personal and financial self protection and 4) Relationships. Note: This course may be repeated in compliance with Title 5 regulations. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ADAP 256 READING AND WRITING FOR LIFE SKILLS - 2 Units
(formerly SPED 256)
Grading: Pass/No Pass Option
Class Hours: 27 lecture/27 lab total
This course is constructed to help students with disabilities and/or remedial level skills enhance reading and writing for vocational or academic tasks. Instruction will include word attack strategies, vocabulary development, word usage, basic writing conventions, sentence writing, paragraph writing, critical thinking opportunities, and interpretive comprehension. Materials will be tailored to student's individual skill level. Note: This course may be repeated in compliance with Title 5 regulations.

ADAP 258 MATHEMATICS FOR LIFE SKILLS - 2 Units (formerly SPED 258) Grading: Pass/No Pass Option
Class Hours: 27 lecture/27 lab total
This course is constructed to help students with disabilities and/or remedial level skills enhance basic mathematics skills for vocational or academic tasks. Progressive, individualized instruction provided in basic arithmetic computation of
whole numbers, fractions, mixed numbers, and decimals, in understanding uses of ratios, percents and proportions; in word problem decoding, and in measurement and basic geometric concepts. Note: This course may be repeated in compliance with Title 5 regulations. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ADAP 297 SPECIAL TOPICS IN SPECIAL EDUCATION - .5-2.0 Units (formerly SPED 297)
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with special education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ADAP 298 SPECIAL TOPICS IN SPECIAL EDUCATION - 0.5-2.0 Units (formerly SPED 298)

Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics dealing with education and disabilities such as the use of assistive technologies, and methods of effective learning for specific types of impairments. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ADMINISTRATION OF JUSTICE (ADJU)

ADJU 10 INTRODUCTION TO ADMINISTRATION OF JUSTICE - 3 Units Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The history and philosophy of administration of justice in America. Recapitulation of the system, identifying the various sub-systems, role expectations, and their interrelationships; theories of crime, punishment, and rehabilitation ethics, education and the training for professionalism in the system. This course may be offered in a distance education format. Required for Administration of Justice majors.

ADJU 11 TRAFFIC CONTROL AND INVESTIGATION - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
A study of the vehicle code of the State of California as it pertains to Law Enforcement Officers and discussions of leading court cases. Covers Vehicle Code definitions, organization of the D.M.V. and C.H.P., registration, licensing, and Rules of the Road covering all moving vehicle violations, parking, pedestrian and equipment violations. Also, a study of the principles and practices of accident investigation, including selective enforcement procedures and data use, hit-and-run accidents, determination of speed from skid marks.

## ADJU 15 CONCEPTS OF CRIMINAL LAW - 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Historical development and philosophy of law. Definitions, concepts, specific Penal Code sections and their application to the criminal justice system. Principles of constitutional, federal, state and civil laws as they apply to and affect law enforcement; rights, duties and limitation of officers and citizens structure, definition, and case study of applicable sections of the Health and Safety Code and other related codes. Required for Administration of Justice majors.

ADJU 16 LEGAL ASPECTS OF EVIDENCE - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Origin, development and philosophy of evidence; kinds and degrees of evidence, and rules governing admissibility; judicial decisions interpreting individual rights, search and seizure, the case study approach. Required for Administration of Justice majors.

ADJU 17 PRINCIPLES \& PROCEDURES OF THE JUSTICE SYSTEM - 3 Units Grading: Pass/No Pass Option
Class Hours: 54 lecture total
A study of California and federal courts systems, detailed analysis of all aspects of the criminal justice system, especially identifying functions and relationships between the various sub-systems procedures from incident to final disposition; function of constitutional, federal, state, and civil law as it applies to and affects criminal justice. Required for Administration of Justice majors.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.

## ADJU 18 COMMUNITY RELATIONS - 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An in-depth exploration of the roles of the Administration of Justice practitioners and their agencies. Through interaction and study the student will become aware of the interrelationship and role expectations among the various agencies and the public. Principal emphasis will be placed upon the professional image of the system of justice administration and the development of positive relationships between members of the system and the public. Required for Administration of Justice majors. This course may be offered in a distance education format.

ADJU 20 PRINCIPLES OF INVESTIGATION - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
The study of basic principles of all types of investigation utilized in the justice system. Coverage will include human aspects in dealing with the public, specific knowledge necessary for handling crime scenes; interviews, evidence, surveillance, follow-up, technical resources and case preparation. Required for Administration of Justice majors.

## ADJU 21 POLICE FIELD OPERATIONS - 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Exploration of theories, philosophies, and concepts related to the role expectations of the line enforcement officer. Emphasis is placed upon the patrol, traffic, and public service responsibilities and their relationship to the Administration of Justice System.

ADJU 22 JUVENILE PROCEDURES - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
The organization, functions and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; and juvenile status and court procedures.

## ADJU 23 CAREER PLANNING FOR ADMINISTRATION OF JUSTICE 3 Units Grading: Pass/No Pass Option

Class Hours: 54 lecture total
Career Planning for Administration of Justice is designed to acquaint students with current employment techniques and standards in multiple areas of the Administration of Justice field. Students will be exposed to multi-agency recruiting, testing and hiring practices. Students will learn to identify personal problematic areas regarding these practices and will be instructed as to how to seek out and obtain possible solutions to these problems.

ADJU 24 MULTI-CULTURAL ISSUES IN LAW ENFORCEMENT - 3 Units Grading: Pass/No Pass Option
Note: Required field trip
Class Hours: 54 lecture total
This class identifies cultural diversity issues related to law enforcement. Specific areas such as history, current make-up, value of diversity, recognition and handling are discussed. Law enforcement issues relative to sexual harassment, victimology and crisis intervention are covered. Course satisfies P.O.S.T. Basic Academy Part 1 curriculum requirements.

ADJU 25 SUBSTANTIVE LAW - 3 Units (P/NP Option)
Class Hours: 54 lecture total
An in-depth study of the substantive laws commonly encountered by the municipal, county, or state police officer or investigator or other criminal justice employee. The scope of the course includes misdemeanor and felony violations of the criminal statutes.

ADJU 26 COURTROOM TESTIMONY \& REPORT WRITING - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Provides practical instruction and experience in the proper techniques of report writing and presentation of courtroom evidence. Major emphasis will include the correct writing process, spelling, main elements of a report, report content as well as important aspects of courtroom testimony. Required for Administration of Justice majors.

ADJU 30 WILDLIFE LAW ENFORCEMENT - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Students will develop an understanding of the practice of wildlife enforcement. Students will analyze various wildlife enforcement situations and learn to apply management techniques to properly and safely utilize our wildlife populations.

ADJU 40 INSTITUTIONAL \& FIELD SERVICES - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course shall cover the philosophy and history of correctional services. A survey of the correctional sub-systems of institutions by type and function, probation concepts, and parole operations is presented. A discussion of correctional employee responsibilities as applied to offender behavior modification via supervisory control techniques is discussed, as well as, rehabilitation goals as they affect individual and inmate cultural groups in both confined and field settings. This course may be offered in a distance education format.

ADJU 41 FUNDAMENTALS OF CRIME AND DELINQUENCY - 3 Units Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introduction to major types of criminal behavior, roles and careers of offenders, factors which contribute to the production of criminality or delinquecy; methods used in dealing with violators in the justice system; the changing roles of police, courts, and aftercare process of sentence, probation, prisons, and parole; changes of the law in crime control and treatment processes. This course may be offered in a distance education format.

## ADJU 42 INTERVIEWING AND COUNSELING - 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Introduction to approaches of behavior modification through interviewing and counseling. An overview of the techniques available to entry-level practitioners in corrections, counseling and interviewing. Creates an awareness of advanced methods utilized by professional counselors. Traces the development of positive relationships between the client and corrections personnel.

ADJU 94 ADMINISTRATION OF JUSTICE WORKSITE LEARNING - 1-8 Units Grading: Pass/No Pass Option
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ADJU 100 P.C. 832 ARREST COURSE - 2 Units

## Grading: Pass/No Pass Option

Notes:

1. This course does not include P.C. 832 Firearms Training. Students wishing to receive such training need to concurrently enroll in ADJU 102.
2. Students taking this course may be required to submit fingerprint card to DOJ and pay a substantial fee for a background check. Instructor will explain requirements at first class session.
3. The ADJU 100 course requires the use of POST workbooks which will cost the student approximately $\$ 100$.
4. If you intend to continue in the POST basic academy Modular format this course is not required. You should enroll directly in ADJU 131 Regular Basic Course Modular Format Level III Academy.
Class Hours: 40 lecture total
Designed to satisfy the curriculum standards of the Commission on Peace Officer Standards and Training as required by Penal Code Section 832 for peace officers; includes laws of arrest, search and seizure, methods of arrest, and discretionary decision-making, mandatory for all peace officers who do not possess a basic certificate awarded by the Commission on Peace Officer Standards and Training.

## ADJU 102 P.C. 832 FIREARMS - . 5 Unit (formerly ADJU 110)

Grading: Pass/No Pass Option
Limitation on Enrollment: Student must be at least 18 years of age to register for this course. Student will be required to submit a Live Scan report to the DOJ (at the student's expense) to verify eligibility to possess/carry a firearm. The results of the Live Scan must be presented to the instructor the first day of class.
Corequisite: Student must be concurrently enrolled in, or have completed ADJU 100 with a grade of $C$ or higher.
Note: Students are required to provide their own ammunition for the range.
Class Hours: 27 lab total
Course meets curriculum and competency objectives for the firearms portion of the Commission on Peace Officer Standards and Training (P.O.S.T.) P.C. 832 training standard. Students will receive training on use and safety of firearms. They will also be required to fire a handgun and meet an accuracy standard established by P.O.S.T.

ADJU 103 COMMUNITY RESOURCES AND CRISIS INTERVENTION -2 Units Grading: Pass/No Pass Option
Class Hours: 36 lecture total
The course will familiarize students with community health, education, and social service resources as related to identified social problems. In-depth instruction will be provided regarding crisis communication skills including active listening, community referrals, and problem-solving. Students will be able to communicate in crisis situations and identify appropriate referrals through a problem-solving perspective.

ADJU 106 SEXUAL ASSAULT AND DOMESTIC VIOLENCE EDUCATION \& TRAINING - 4 Units
Grading: Pass/No Pass Option
Class Hours: 72 lecture total
This course covers the history, causes and dynamics of domestic violence and sexual assault. It will also cover existing laws and regulation in California with regards to sexual assault and domestic violence. Incident impact on individuals, family structure and the community will be discussed. The course is specifically designed to provide training to those who may become involved in crisis intervention and sexual assault and domestic violence victim advocacy, as well as those pursuing a career in law enforcement, education or social services.

ADJU 131 REGULAR BASIC COURSE MODULAR FORMAT LEVEL III ACADEMY - 6 Units
Notes:

1. Students taking this course may be required to submit fingerprint card to DOJ and pay a substantial fee for a background check. Instructor will explain requirements at first class session.
2. This course now requires the use of POST workbooks which will cost the student approximately $\$ 100$.
3. This course requires a material fee (ammunition) of approximately $\$ 100$. Class Hours: 90 lecture (includes 7 hours written)/54 lab total
A course certified by the Commission on Peace Officer Standards and Training that meets the regular basic training requirements of a Modular Level III Regular Basic Academy. This is a regular basic course that includes training in law, patrol procedures, criminal investigation, arrest methods, juvenile procedures, vehicle operations, discretionary decision-making, community relations, and firearms. Course hours/units may change due to P.O.S.T. mandated changes.

ADJU 132 REGULAR BASIC COURSE MODULAR FORMAT LEVEL II

## ACADEMY - 8 Units

Limitation on Enrollment: Student must have successfully completed a P.O.S.T. certified Module 3 course within the last three years.
Class Hours: 129 lecture/60 lab total
A course certified by the Commission on Peace Officer Standards and Training that meets the basic training requirements of a Modular Level II Basic Course. This is an advanced course that includes training in law, patrol procedures, criminal investigation, arrest methods, juvenile procedures, vehicle operations, discretionary decision-making, community relations, and firearms. State mandates require that students successfully complete Modular Level III prior to enrolling in this course. Course hours/units may change due to P.O.S.T. mandated changes.

ADJU 197 SPECIAL TOPICS IN ADMIN. OF JUSTICE - .5-3 Units
Class Hours: 9-54 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge and new laws in Administration of Justice. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Administration of Justice majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## AG - GENERAL AGRICULTURE (AG)

## AG 1 CAREER PLANNING FOR AGRICULTURE - 2 Units (formerly ENVR 1)

Grading: Pass/No Pass Option
Class Hours: 36 lecture total
Career opportunities and requirements in Agriculture, Agriculture Business, Equine Science, Environmental Horticulture and Veterinary Technology will be examined. Students will learn how to apply for jobs. Traits of highly successful people will be explored by formal presentation and interactive assignments. Environmental awareness and interrelationships with career success will be covered.

AG 6 CAREER PLACEMENT - AG AND NATURAL RESOURCES - 1 Unit (formerly AGRI 6)
Grading: Pass/No Pass Option
Note: Designed for students concurrently completing or who have completed the core course requirements in agriculture, horticulture, and natural resources majors. This course may require a multi-day, overnight field trip to survey the industry. Class Hours: 18 lecture total
This class is designed to give students an overview of the California agriculture, horticulture, and natural resources industry and assist in obtaining the best possible employment during the summer and upon graduation. Students will learn interview techniques, will develop an employment portfolio, and will learn how to apply for jobs. This class is required for all agriculture, horticulture, and natural resources majors.

## AG 9 <br> AGRICULTURE \& NATURAL RESOURCES LEADERSHIP - 1 Unit

 (formerly ENVR 9)Grading: Pass/No Pass Option
Note: Required field trips
Class Hours: 9 lecture/27 lab total
This course is designed to develop leadership qualities in students. "Hands-on" techniques will be used to facilitate problem solving, cooperative work ethics, developing initiative, managing and organizing information, flexible thinking and effective questioning. Practical experience in conducting business as a group will be gained by participation. Note: This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

AG 58 STUDENT ENTERPRISE PROJECTS - 1-4 Units (formerly AGRI 58) Limitation on Enrollment: Student must have a sponsoring instructor from the Division.
Note: Student projects are subject to approval by a project evaluation committee. Class Hours: 9 lecture/27-189 lab total
Selection and completion of a management/production enterprise project under faculty supervision. Each student will be required to develop a project plan, timeline, budget and contract with the sponsoring instructor.

## AG 94 AG WORKSITE LEARNING-1-8 Units (formerly AGRI 94)

Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on-the-job performance. FINANCIAL AID STUDENTS: Students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.

AG 97 SPECIAL TOPICS IN AGRICULTURE - .5-2 Units (form. AGRI 97) Grading: Pass/No Pass Option Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in agriculture. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

[^3]AG 197 SPECIAL TOPICS IN AGRICULTURE - .5-2 Units (form. AGRI 197) Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in agriculture. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## AG - AGRICULTURE BUSINESS (AGAB)

AGAB 51 AGRICULTURE ACCOUNTING - 3 Units (formerly AGRI 51)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
A study of the elements of agricultural record keeping and their analysis for maximum efficiency. Course includes compiling a depreciation record, financial statement, simple accounting, and obtaining credit.

AGAB 53 INTRODUCTION TO AGRICULTURE BUSINESS - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Provides a basic understanding of the business and economics of the agricultural industry; an introduction to the economic aspects of agriculture and their implications to the agricultural producer, consumer and the food system; management principles encountered in the day to day operation of an agricultural enterprise as they relate to the decision making process.

AGAB 54 AGRICULTURE ECONOMICS - 3 Units (formerly AGRI 54)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
An introduction to economic and business principles as they relate to resource management. The focus of the course will be to relate economic theories and principles to applied agri-business and resource management problem solving. Student involvement in practical marketing, financing, promotions, business analysis, retailing, or some other practical economic problem will be required.

## AG - ANIMAL SCIENCE (AGAS)

AGAS 10 LIVESTOCK SELECTION - 3 Units (formerly AGRI 10)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in AGAS 19
Note: Field trips to area ranches may be taken.
Class Hours: 36 lecture/54 lab total
A course designed to evaluate and select desirable production livestock. Animal genetics, performance records, grading and meat quality characteristics will be discussed as important tools in selection. The majority of lab time will be spent judging live animals.

## AGAS 11 LIVESTOCK FEEDING AND NUTRITION - 3 Units (formerly AGRI 11)

Grading: Pass/No Pass Option
Class Hours: 54 lecture total
A study of the digestive physiology of farm animals; their utilization of the basic nutrients, feedstuffs, and feed additives. Common feeds in Northern California will be used to blend practical farm rations for beef, dairy, sheep, swine and horses. Time will be allotted to cost analysis of commercial feeds and least-cost computer ration programs.

AGAS 15 ARTIFICIAL INSEMINATION - 1 Unit (formerly AGRI 15)
Grading: Pass/No Pass Option
Class Hours: 9 lecture $/ 27$ lab total
A course to familiarize students with basic techniques of Artificial Insemination in cattle. Demonstration and hands-on involvement will include: synchronization, handling of semen, livestock handling, and breeding techniques.

AGAS 19 PRINCIPLES OF ANIMAL SCIENCE (form. AGRI 19) - 3 Units Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total
An introduction to the principles of animal science presented in terms of an animal's biological cycle or production. Topics will include basic nutrition, genetics, reproduction, and animal health relating to domestic farm animals. In addition to investigating modern production practices, the impact of animal agriculture upon mankind and the environment will also be considered. The weekly lab session will be devoted to investigating the basic management practices associated with each livestock species.

AGAS 30 LIVESTOCK PRODUCTION - 3 Units
Class Hours: 36 lecture/54 lab total
This course is a study of the principles and practices of purebred and commercial swine, sheep and beef cattle production throughout California, the United States and the World. Emphasis will be placed on the importance of breeds, breeding principles, selection, nutrition, environmental management, health, marketing and record keeping to ensure scientifically-based management decisions and consumer product acceptance.

## AG - ENVIRONMENTAL HORTICULTURE (AGEH)

AGEH 22 NURSERY PRACTICES AND PLANT PROPAGATION - 2 Units (formerly HORT 22, HORT 32A)
Class Hours: 18 lecture/54 lab total
This course is required for all Environmental Horticulture majors. The methods and principles used in the propagation of plants, including both sexual and asexual propagation will be demonstrated and practiced. Other topics related to successful plant propagation such as soil preparation, transplanting and potting, disease and insect control, irrigation, and fertilization will also be covered.

## AGEH 23 NURSERY PRACTICES AND MANAGEMENT - 2 Units <br> (formerly HORT 23, HORT 32B)

Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
This is required for all Environmental Horticulture majors. This hands-on course will cover production schedules, marketing strategies, customer service, product displays, greenhouse and nursery management and much more. Best practices and economic feasibility will be emphasized.

## AGEH 26 INTEGRATED PEST MANAGEMENT IN ENVIRONMENTAL HORTICULTURE - 3 Units (formerly HORT 26, AGRI 26) <br> Grading: Pass/No Pass Option <br> Class Hours: 36 lecture/54 lab total

Exploration, identification and control of major horticultural pests, including insects, weeds, and diseases; impact of pests on commercial nursery crops and the landscape is also discussed. Integrated pest management including cultural, biological, mechanical/physical, and chemical control methods is emphasized. Course is designed to assist students in preparing for California licensing examines in pest management. Laboratory required. (C-ID AG-EH 120L)

## AGEH 27 PLANT IDENTIFICATION AND TAXONOMY OF EVERGREEN

 TREES, SHRUBS AND GROUND COVERS (form. HORT 27) - 1 Unit Grading: Pass/No Pass OptionClass Hours: 18 lecture/12 lab total
This is a course which will familiarize the student with approximately 65 commonly used landscape plants. The plants' taxonomic description, landscape uses, and culture will be emphasized. This is the first of three plant identification courses students working toward an AA or AS degree in Environmental Horticulture are required to take. AGEH 27, AGEH 28 and AGEH 29 are a series and may be taken in any order.

AGEH 28 PLANT IDENTIFICATION AND TAXONOMY OF DECIDUOUS TREES, SHRUBS AND GROUND COVERS - 1 Unit (formerly HORT 28)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/12 lab total
This is a course which will familiarize the students with approximately 65 commonly used landscape plants. Each plant's taxonomic description, land uses, and culture will be emphasized. This is the second of three plant identification courses students working toward an AA or AS Degree in Environmental Horticulture are required to take. AGEH 27, AGEH 28 and AGEH 29 are a series and may be taken in any order.

## AGEH 29 PLANT IDENTIFICATION AND TAXONOMY OF TREES, SHRUBS

 AND GROUND COVERS - 1 Unit (formerly HORT 29)Grading: Pass/No Pass Option
Class Hours: 18 lecture/12 lab tota
This is a course which will familiarize the student with approximately 65 commonly used landscape plants. The plant's taxonomic description, landscape uses, and culture will be emphasized. This is the third of three plant identification courses students working toward an AA or AS degree in Environmental Horticulture are required to take. AGEH 27 and AGEH 28 are the first and second in the series, but these courses can be taken in any order. The scheduling of these classes will reflect plant phenology.

AGEH 31 LANDSCAPE IRRIGATION - 3 Units (formerly HORT 31, AGRI 31) Grading: Pass/No Pass Option
Advisory: A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher Class Hours: 36 lecture/54 lab total
This is a study of water hydraulics, irrigation systems design and installation procedures and irrigation scheduling. Techniques in the operation and maintenance of irrigation systems will also be presented. Emphasis will be placed on residential design and installation, but commercial design and installation will be covered. This course is required for all Environmental Horticulture majors.

AGEH 31.1 LANDSCAPE IRRIGATION - DESIGN - 1 Unit
(formerly HORT 31.1)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 12 lecture/18 lab total
Modular delivery of course content of AGEH 31. This is a study of irrigation systems design, water hydraulics and plant/soil/water relationships. Emphasis will be placed on residential design as well as commercial design.
Completion of AGEH 31.1, AGEH 31.2 and AGEH 31.3 is the equivalent of AGEH 31. This course is required for all Environmental Horticulture majors.

AGEH 31.2 LANDSCAPE IRRIGATION - INSTALLATION - 1 Unit (formerly HORT 31.2)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher Class Hours: 12 lecture/18 lab total
Modular delivery of AGEH 31. This class covers the basics in reading blueprints, preparing a bill of materials and installing an irrigation system. Emphasis will be placed on residential installation but commercial installation will be covered. This course is required for all Environmental Horticulture majors. Completion of AGEH 31.1, AGEH 31.2 and AGEH 31.3 is the equivalent to AGEH 31.

AGEH 31.3 LANDSCAPE IRRIGATION - TROUBLESHOOT AND SCHEDULE 1 Unit (formerly HORT 31.3)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 12 lecture/18 lab total
Modular delivery of AGEH 31. This is a study of irrigation system operation and scheduling. Techniques in the operation and maintenance and troubleshooting of irrigation systems will be presented. This course is required for all Environmental Horticulture majors. Completion of AGEH 31.1, AGEH 31.2 and AGEH 31.3 is the equivalent of AGEH 31.

## AGEH 33 ENVIRONMENTAL HORTICULTURE - 3 Units (formerly HORT 33, AGRI 33)

Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Environmental horticulture provides students with an understanding of how various aspects of the environment relate to plant growth and how human horticultural practices can influence the environment. This course explains the basic principles of botany and horticulture. Topics include plant structure, growth, physiology, and reproduction; climate, soil, and ecology; plant problems, including pests, diseases and effects of pollution; plant genetics, human-manipulated plants, and the world food picture. This course is useful for plant scientists, horticulturists, and those seeking science credits. Required for first-year Environmental Horticulture Majors. This course may be offered in a distance-learning format.

## AGEH 34 BEGINNING FLORAL DESIGN - FALL FLOWERS - 2 Units (formerly HORT 34, HORT 34AB)

Grading: Pass/No Pass Option
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Class Hours: 18 lecture/54 lab total
Course introduces the beginning floral design student to the principles and techniques of flower arranging. The subject matter includes a blend of art, science, business, and career in preparation for entering the floral industry and related areas. Fall flowers and fall/winter holiday arrangements will be emphasized. Note: This course may be repeated one additional time for a total of 2 course enrollments since course content varies and skills are enhanced by supervised repetition and practice.

## AGEH 35 LANDSCAPE DESIGN 3 Units (formerly HORT 35, AGRI 35)

Grading: Pass/No Pass Option
Prerequisite: A grade of $C$ or higher in AGEH 27 and AGEH 28 and AGEH 29, or a grade of C or higher in AGNR 6
Class Hours: 36 lecture/54 lab total
This course is a requirement for all Environmental Horticulture majors. This course emphasizes the process leading to the development of the residential design. The incorporation of design principles i.e. unity, rhythm, repetition, balance, etc. and how the principles are used to create a functional and pleasing composition with plant material and other landscape elements will be stressed. Emphasis is on residential design, both rural and suburban.

AGEH 36 FLORAL DESIGN FOR WEDDINGS AND SPECIAL OCCASIONS 2 Units (formerly HORT 36)
Grading: Pass/No Pass Option
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting Class Hours: 18 lecture/54 lab total
This course provides instruction in floristry skills pertaining to weddings and flowers to wear and carry. This course will provide the student with the skills necessary for higher entry-level jobs in commercial floristry. Some subjects to be covered in this course include bouquets, corsages, and body flowers, wedding and reception decoration, including altar designs, candelabra, cake and table centerpieces.

## AGEH 37 NURSERY AND FLORIST MANAGEMENT - 3 Units (formerly HORT 37, AGRI 37) <br> Grading: Pass/No Pass Option

Class Hours: 54 lecture total
The study of retail and wholesale florist and florist/nursery operations including area within mass markets. Specific areas that will be covered are management problems, public relations, advertising, financing, wire service, sales, display and merchandising.

## AGEH 38 LANDSCAPE AND TURF MANAGEMENT - 3 Units

 (formerly HORT 38, AGRI 38)Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher; and a grade of C or higher in MATH 220, or Math Placement Level 1 or higher
Class Hours: 36 lecture/54 lab total
This is a required course for Environmental Horticulture majors. The installation of lawns, groundcovers, shrubs and trees will be covered. The practices of pruning, trimming, mowing, watering, fertilizing, and pesticide application as applied to landscape management of home, parks, highways, and how to estimate and bid in all areas of landscape management will also be covered.

AGEH 39 TROPICAL FLORAL DESIGN - 1.5 Units (formerly HORT 39) Grading: Pass/No Pass Option
Advisory: A grade of C or higher in AGEH 34 or AGEH 44
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Class Hours: 27 lecture/9 lab total
This course covers all aspects of floral design as it relates to tropical flowers. Students will learn to make corsages, formal/linear design, leisure and party decorations from tropical flowers.

## AGEH 40 INTERMEDIATE FLORAL DESIGN - 2 Units (formerly HORT 40, HORT 34CD)

Prerequisite: A grade of $C$ or higher in AGEH 34 or AGEH 44
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Class Hours: 18 lecture/54 lab total
Instruction in floristry skills related to contemporary styles of design for all occasions, wedding, and sympathy work. The application of techniques for mass and line style designs including Flemish, Oriental, parallel, contemporary, free-style, vegetative, and interpretive will be addressed. Note: This course may be repeated once for a total of two enrollments since the course content varies and skills are enhanced by supervised repetition and practice.

## AGEH 41 SELECTION AND CARE OF BLOOMING AND TROPICAL PLANTS - 1.5 Units (formerly HORT 41, HORT 135, AGRI 135)

Grading: Pass/No Pass Option
Class Hours: 18 lecture/27 lab total
Designed to prepare and upgrade skills of those planning to work with tropical plants in nurseries and plant shops. Emphasis will be placed upon knowledge of plants and their care and use. During lab, students will be directed in practical work using various types of planters constructed in the industry. The class will include a thorough discussion of propagation techniques, pests and diseases common to houseplants.

## AGEH 44 BEGINNING FLORAL DESIGN - SPRING FLOWERS - 2 Units (formerly HORT 44)

Grading: Pass/No Pass Option
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting Class Hours: 18 lecture/54 lab total
Course introduces the beginning floral design student to the principles and techniques of flower arranging. The subject matter includes a blend of art, science, business, and career in preparation for entering the floral industry and related areas. Spring flowers and spring holiday arrangements will be emphasized. Note: This course may be repeated one additional time for a total of 2 course enrollments since course content varies and skills are enhanced by supervised repetition and practice.

AGEH 45 HOLIDAY DECORATIONS AND BANQUETS - 1 Unit (formerly HORT 45)
Grading: Pass/No Pass Option
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Class Hours: 18 lecture/9 lab total
This class will offer in-depth instruction on the specific techniques and floral materials used in holiday designing. Floral pieces specific to the fall and winter holidays will be created in class.

AGEH 46 SYMPATHY FLOWERS (form. HORT 46) - 1 Unit
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in AGEH 34
Class Hours: 18 lecture/9 lab total
This class will offer in-depth instruction on the specific floral materials and techniques used in sympathy designing. Servicing the order and customer service relating to funerals and memorials will be emphasized. Floral pieces specific to funerals and memorials will be practiced in class.

AGEH 60 MASTER GARDENER TRAINING (formerly HORT 60) - 3 Units Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Class Hours: 54 lecture total
This is the training course for the Master Gardener Program, a community service organization designed to relay research based horticultural information to the home gardener. The Master Gardener program was developed by the University Cooperative Extension to train interested horticultural enthusiasts to assist local gardeners in diagnosing plant problems and to provide science based information for keeping home landscapes and the environment healthy. The University of California has agreed to let Shasta College use their training materials which are provided through this class. Topics covered in this course include pesticide use, IPM, weed identification and management, pruning, plant diseases, soils, fertilizers, growing vegetables, native plants, vermiculture, watering and many other plant related topics. This is a required course for anyone interested in obtaining a UC Extension certification as a Shasta College Master Gardener.

## AGEH 71 ORGANIC GARDENING PRACTICES (SUMMER) - 1 Unit (formerly HORT 71)

Grading: Pass/No Pass Option
Note: This course is complementary to, but independent from organic gardening practices for spring (AGEH 70) and fall (AGEH 72) seasons.
Class Hours: 9 lecture/27 lab total
Instruction includes summer crops, irrigation, pests and cultural practices for summer. Students will be planting and maintaining a garden plot. Subject matter in this course is supplementary to AGEH 70 and AGEH 72, which addresses gardening practices for spring and fall seasons.

## AGEH 72 ORGANIC GARDENING PRACTICES (FALL) - 1 Unit (formerly HORT 72)

Grading: Pass/No Pass Option
Note: This course is complementary to, but independent from organic gardening practices for spring (AGEH 70) and summer (AGEH 71) seasons.
Class Hours: 9 lecture/27 lab total
Fall vegetable growing practices for the home and market gardener. Includes fall vegetable cover crops and cultivating practices. Students will be planting and maintaining a garden plot. Since subject matter varies with each seasonal crop, this course is supplementary to AGEH 70 and AGEH 71, which addresses gardening practices for spring and summer seasons.

AGEH 75 WATER GARDENING (form. HORT 75) - 1 Unit (P/NP Option) Class Hours: 9 lecture/27 lab total
This course covers the basics of planning, constructing and maintaining a water feature in the landscape. Topics will include; selection, care and propagation of water and bog plants, planning and construction of water feature and general maintenance of the water garden. Selection and care of fish will also be covered.

AGEH 94 HORTICULTURE WORKSITE LEARNING - 1-8 Units
(formerly HORT 94)
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

AGEH 97 SPECIAL TOPICS IN ENVIRONMENTAL HORTICULTURE -.5-2 Units (formerly HORT 97)
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in environmental horticulture. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

AGEH 98 SPECIAL TOPICS IN ENVIRONMENTAL HORTICULTURE - LAB SKILLS - .5-2 Units (formerly HORT 98)
Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics in a lab setting dealing with changing knowledge in environmental horticulture. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## AGEH 120 SELECTED TOPICS IN ENVIRONMENTAL HORTICULTURE: <br> PRUNING - 5 Units (formerly HORT 120, HORT 128E, AGRI 128E)

Grading: Pass/No Pass Option
Class Hours: 9 lecture total
A basic course in pruning techniques of ornamental plants, and the specific categories of flower-bearing and fruit-bearing trees, shrubs, and vines. The focus of this short course is to teach the student why plants are pruned, when plants should be pruned and how plants are pruned.

## AGEH 122 SELECTED TOPICS IN ENVIRONMENTAL HORTICULTURE: PLANT PROPAGATION - 5 Unit <br> (formerly HORT 122, HORT 128R, AGRI 128R)

Grading: Pass/No Pass Option
Class Hours: 9 lecture total
Course will cover propagation by seed, cuttings, layering, grafting and budding. Rootstock selection will also be covered.

AGEH 125 MICRO-IRRIGATION AND LOW WATER USE LANDSCAPING 1 Unit (formerly HORT 125, AGRI 125)
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
Course will cover methods of reducing irrigation requirements of ornamental landscapes, including reducing evaporation, appropriate irrigation methods, and appropriate plants.

## AGEH 130 INTRODUCTION TO NATIVE PLANTS - 1 Unit (formerly HORT 130, AGRI 130) <br> Grading: Pass/No Pass Option

Note: Includes one local plant collection field trip.
Class Hours: 18 lecture total
Covers the strategy of drought tolerant plants, as well as the identification, collection, and propagation of native and non-native plants used in the landscape.

## AGEH 197 SPECIAL TOPICS IN ENVIRONMENTAL HORTICULTURE MANAGEMENT - .5-2 Units (formerly HORT 197)

Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in environmental horticulture management. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic.

## AG-EQUINE (AGEQ)

AGEQ 12 HORSEMANSHIP - 3 Units (formerly AGRI 12)
Grading: Pass/No Pass Option
Note: It is recommended that students provide their own horse.
Class Hours: 36 lecture/54 lab total
This course is designed for those interested in learning to ride and handle horses. Includes basic equitation, proper seat and hands, tack identification and use, and basic care and grooming of the pleasure horse.

AGEQ 13 HORSE HUSBANDRY - 3 Units (formerly AGRI 13)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
The study of horse production practices including breed types, selection, conformation, nutrition, breeding and first aid. Emphasis will be placed on general health care and how to detect health problems. This course is designed for the beginner to intermediate horseperson.

## AGEQ 14 WESTERN RIDING AND TRAINING - 3 Units (formerly AGRI 14, AGRI 111)

Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total
This course specializes in the many phases of Western riding and training. It is suited for intermediate level riders and those interested in a career. Subjects covered include basic training, groundwork, showing, trail riding, and more. It is essential in the Certificate Program as it better prepares the student to enter the horse business. Note: This course may be repeated one time for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

AGEQ 21 HORSE MANAGEMENT (formerly AGRI 21, AGRI 115) - 3 Units Grading: Pass/No Pass Option
Class Hours: 54 lecture total
An intensive study of the horse industry including factors for career success, including small stable management. Record keeping and facility management are also discussed. This class will emphasize the necessary skills needed to be a manager of a boarding, breeding, or training facility.

## AGEQ 109 EQUINE REPRODUCTION - 1.5 Units

Grading: Pass/No Pass Option
Class Hours: 18 lecture/27 lab total
An in-depth study of equine reproduction including basic principles of animal genetics, reproductive anatomy and physiology, breeding management of mares and stallions, evaluation of fertility, reproductive diseases and care of the pregnant mare and newborn foal. Artificial insemination, embryo transfer and current innovations in assisted reproduction will also be discussed. The laboratory portion of the course is designed to complement and reinforce the lecture by providing students with opportunities to learn practical skills in the field of equine reproduction. Students will be encouraged to develop skills in horsemanship, interpretation of equine sexual behavior, breeding management of mares and stallions and collection, evaluation and processing of fresh cooled and frozen semen. Ultrasound, artificial insemination and embryo transfer will be demonstrated. Some time will be dedicated to the use of computer resources currently available to breeders. There will be opportunities to participate in field trips.

AGEQ 110 HORSE TRAINING (form. AGRI 110) - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in AGEQ 12
Class Hours: 36 lecture/54 lab total
A versatile approach to the basic principles involved in handling and training the young horse. Curriculum includes groundwork, trailering, starting a colt, and advancing the green horse. Problem solving will be discussed and worked on throughout the course. Horses are desired. Note: This course may be repeated one time for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

AGEQ 111 HANDLING PROBLEM HORSES - 3 Units
Note: It is recommended that students provide their own horse.
Class Hours: 36 lecture/54 lab total
This course is designed to help people handle horses with existing problems as well as educating handlers on how to prevent problems from starting with their horses. Subject matter includes horse behavior and dealing with specific problems such as rearing, bucking, refusals, biting, trailering, and problems on the trail. Young horses are welcomed and novice handlers are encouraged to take this course.

AGEQ 112 HORSESHOEING - 2 Units (formerly AGRI 112, AGRI 112A)
Grading: Pass/No Pass Option
Note: Students must provide their own horse for shoeing.
Class Hours: 27 lecture/27 lab total
Course offers the student an opportunity to study the anatomy and physiology of the horse's foot, leg, and posture. Instruction will be given in trimming of horse's feet and in the fitting and nailing of shoes.

AGEQ 113 HORSE OWNERSHIP AND BASIC HANDLING - 3 Units
Note: Field trips will be taken to local horse ranches.
Class Hours: 54 lecture total
This course specializes in what it takes to own horses on a small and large scale. Subject matter will include horse behavior, breeding, stable management, property ownership, pasture management, water, fly systems, barn plans, arena footing and much more.

## AGEQ 114 BEGINNING ENGLISH RIDING AND TRAINING - 3 Units (formerly AGRI 114, AGRI 111B)

Grading: Pass/No Pass Option
Note: Horses are not provided and helmets are required Class Hours: 36 lecture/54 lab total
This course specializes in the many phases of English riding and training. It will bring together the material which is important to the student interested in horses as a career. This course helps to prepare the student to enter the horse business as a riding instructor, trainer, or manager.

AGEQ 115 SHOWING AND TRAINING THE HUNTER/JUMPER - 2 Units (formerly AGRI 115)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in AGEQ 114
Class Hours: 18 lecture/54 lab total
This course is designed to introduce the intermediate or advanced rider to the proper selection, training and showing of the classic English hunter/jumper. Topics covered through labs and lecture will include training, basic dressage and flatwork, approaching jumper safe and properly, fitting the hunter/jumper and rider for shows, and organizational techniques to enhance shared experience.

## AG - MECHANIZED AGRICULTURE (AGMA)

## AGMA 42 FARM POWER AND MACHINERY - 3 Units

Class Hours: 27 lecture/81 lab total
This class covers basic skill-level operation and maintenance of agricultural equipment including tractors, tillage, planting and harvesting machinery. Safe operational practices, proper machine and implement inspection and set-up, and basic operational skills will be covered. Precision agricultural technology, equipment management and field layout will be discussed. The lab activities will include the operation of machinery in the field laboratory.

## AGMA 44 INTRODUCTION TO CONSTRUCTION SKILLS FOR AGRICULTURE AND NATURAL RESOURCES - 3 Units (formerly ENVR 44)

Class Hours: 27 lecture/81 lab total
This course covers the basic construction skills related to agriculture, natural resources, and environmental horticulture. Subjects covered will be mechanical drawing, design layout, arc welding, oxy/acetylene cutting and brazing, carpentry, electrification, small engine theory, concrete work structures, and project construction. Safety will be emphasized.

## AG - NATURAL RESOURCES (AGNR)

## AGNR 1 INTRODUCTION TO NATURAL RESOURCES - 3 Units (formerly NR 1)

Grading: Pass/No Pass Option
Note: Required day field trips
Class Hours: 36 lecture/ 54 lab total
An introduction to the integrated management of forests, soil, watershed, fish, and wildlife in the context of protection and restoration of watersheds and ecosystems. An emphasis will be placed on natural resources careers, policy and law, tools, techniques and practices, and management philosophies of public and private lands. Basic biological and ecological processes will be introduced along with discussion of the scientific method and preparing reports.

## AGNR 4 INTRODUCTION TO RANGE SCIENCE - 3 Units

Grading: Pass/No Pass Option
Note: Required day field trips
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 108 for the lecture portion of the class and an additional 54 hours of lab totaling 162 hours for this course)
Basic range management and improvement practices. Proper utilization of rangeland resources, management for sustainable human and environmental values, use by wild and domestic animals, historical and legal changes in rangeland management. Overview of multiple use principles. Maintenance and improvement of range plant communities, conserving biological diversity and environmental quality in rangelands. The lecture portion of this course may be offered in a distance learning format.

AGNR 6 NATIVE PLANT IDENTIFICATION - 3 Units (formerly NR 6)
Grading: Pass/No Pass Option
Note: Includes one optional overnight weekend field trip.
Class Hours: 36 lecture/54 lab total
The study of botanical characteristics, taxonomy morphology, and community relationships of the major tree and shrub associations in California and Western United States. Includes discussion of commercial uses and geographic ranges of these plants.

AGNR 10 SATELLITE IMAGERY \& MAPPING TECHNIQUES FOR NATURAL RESOURCES - 4 Units (formerly NR 10)
Grading: Pass/No Pass Option
Note: Includes one optional overnight weekend field trip.
Class Hours: 36 lecture/108 lab total
This course covers the use of aerial photographs and satellite imagery to analyze, interpret, and delineate vegetation types, land management practices, wildlife habitat, and other significant environmental parameters. Students will map and spatially analyze these landscape features using computerized geographic information systems. Students will also gain experience orienteering using equipment such as a hand compass, GPS receiver, topographic maps, aerial photographs, or satellite imagery.

AGNR 11 ENVIRONMENTAL ETHICS - 3 Units (formerly ENVR 11, INTR 11) Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the influence of cultural values on the relationship of humans with each other and with plants, animals and the land. An important objective is to develop original and sustaining attitudes and guidelines which will enhance a healthy globe. Sources of western society's historical and current attitudes toward nature as well as alternative cultural perspectives will be explored. Students will emerge from this class with a greater understanding of their individual moral responsibilities toward the environment. This course may be offered in a distance education format.

AGNR 12 ENVIRONMENTAL POLICY AND LAW - 2 Units
Grading: Pass/No Pass Option
Note: Required day field trips
Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 108)
This course will introduce students to various aspects of environmental laws, policy, and agencies responsible for management and regulation of our natural resources. Topics of the course will include origins and importance of environmental law; legal principals; property rights; international, federal, state, and local environmental legislation; and regulatory authorities. The course will include discussion of the Legislative and Regulatory history, and current implementation of the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). Students will gain an understanding of the interactions between federal, state, and local environmental regulations, and how they pertain to environmental compliance and protection, and enforcement for illegal activities. Examples of legislation and regulations to be covered will include aspects of the Federal Clean Water Act (CWA), California Water Code, National Pollution Discharge Elimination System (NPDES), Federal Endangered Species Act (ESA), California Irrigated Lands Program, Local Grading Ordinances, California Storm Water Program, California Streambed Alteration Agreements, and other pertinent federal, state, and local environmental laws

## AGNR 50 NATURAL RESOURCES MEASUREMENTS - 4 Units (formerly NR 50)

Grading: Pass/No Pass Option
Note: Several field trips to various locations will occur as feasible.
Class Hours: 36 lecture/108 lab total (when offered in the Distance Education format, hours will total 108 for the lecture portion of the class and an additional 108 hours of lab totaling 216 hours for this course)
This course is an introduction to the sampling methods and equipment used to inventory forest resources. Log scaling and aerial photo interpretation will also be discussed. Measurements of timber stand growth, quantity and quality, and other forest products including water, range, wildlife and outdoor recreation will also be covered. The lecture portion of this course may be offered in a distance education format.

AGNR 51 SILVICULTURE AND FIRE ECOLOGY - 2 Units (formerly NR 51) Grading: Pass/No Pass Option
Note: Includes one optional overnight weekend field trip and required day trips Class Hours: 18 lecture/54 lab total
Forestry practices and systems used to grow and manage trees and forests for the sustained production of timber products. Course will also cover a survey of fire ecology.

## AGNR 52 COMPUTERS IN AGRICULTURE AND NATURAL RESOURCES 3 Units (formerly ENVR 52, AGRI 52) <br> Grading: Pass/No Pass Option

Class Hours: 36 lecture/54 lab total
This course introduces students to basic computer applications in agriculture, horticulture, natural resources, and related Career Technical Education majors. Students will gain basic computer literacy skills while learning to use examples of industry-specific software. Others topics will include file management, data manipulation, and use of software such as Word, Excel, Access, and PowerPoint. Students will also be exposed to basic concepts and software related to Geographic Information Systems (GIS). This course is required for all agricultural, horticulture, and natural resources majors.

AGNR 53 FOREST PROTECTION AND RESTORATION ECOLOGY - 3 Units (formerly NR 53)
Grading: Pass/No Pass Option
Note: Several field trips to various locations will occur as feasible.
Class Hours: 18 lecture/108 lab total (when offered in the Distance Education format, hours will total 54 for the lecture portion of the class and an additional 108 hours of lab totaling 162 hours for this course)
This course will discuss the biotic and abiotic stress factors that influence forest resource values. Direct and indirect management practices in addition to Silvicultural principles that maintain and enhance biotic balance, biological diversity, and ecosystem health and productivity will be covered. The lecture portion of this course may be offered in a distance education format.

## AGNR 55 INTRODUCTION TO FOREST OPERATIONS - 3 Units (formerly NR 55)

Grading: Pass/No Pass Option
Note: Several field trips to various locations will occur as feasible
Class Hours: 36 lecture/54 lab tota
Develop knowledge and skills to recognize the capabilities and limitations of timber harvesting equipment and systems operating in a broad range of forest resource management situations. After completing the course, students will be able to identify harvest systems that are best matched with the characteristics of the physical, environmental, economic, and social operating environments. Harvest process evaluations and decisions are aided with various forest engineering analysis and tools.

AGNR 60 ENVIRONMENTAL SCIENCE - 3 Units (formerly ENVR 60, NR 60) Grading: Pass/No Pass Option
Advisory: Students who wish to add a lab component to this class should co-enroll in AGNR 61
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is an introduction to the conservation or wise use of natural resources and incorporates discussions about the complex relationships of man to the environment. Students will learn about the diverse agencies that manage our resources along with their history and philosophies. Each of the major natural resources such as water, air, energy, forests, wildlife, agriculture, and soils will be covered and students will learn about the environmental policy and laws that govern use of these resources. An emphasis is placed on the practical components of Environmental Science as it relates to social and economic aspects of conservation. This course may be offered in a distance education format.

AGNR 61 ENVIRONMENTAL SCIENCE LABORATORY - 1 Unit (formerly ENVR 61)
Grading: Pass/No Pass Option
Corequisite: Student must be concurrently enrolled in AGNR 60, or have completed AGNR 60 with a grade of C or higher
Note: May include several field trips
Class Hours: 54 lab total
A laboratory course designed to complement AGNR 60 and to acquaint the students with some of the more common laboratory and field tests and procedures utilized in environmental science.

## AGNR 64 WATERSHED MANAGEMENT AND ECOLOGY - 3 Units (formerly NR 64)

## Grading: Pass/No Pass Option

Note: Field trips to various district facilities, federal, state, county, city, and private agencies will occur as feasible.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 108 for the lecture portion of the class and an additional 54 hours of lab totaling 162 hours for this course)
This course addresses a variety of topics concerned with the quality and quantity of water resources and watershed management, ecology, and restoration. Emphasis will be on the State of California. Coverage will include the hydrologic cycle, water quality, water use and conservation, and watershed health and function. Sources, measurements, quality (pollution and treatment), usage, and conservation of water will be addressed. Environmental impacts of dam construction and hydroplant operation will be discussed. Laboratory work will involve measurements and interpretations of data collected or distributed and watershed restoration project planning and implementation. Field trips to various facilities (federal, state, county, city, private agencies) and restoration/monitoring sites will occur as feasible. The lecture portion of this course may be offered in a distance learning format.

AGNR 65 FOREST ECOLOGY - 3 Units (formerly NR 65, NR 165)
Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 108 for the lecture portion of the class and an additional 54 hours of lab totaling 162 hours for this course)
The forest community is used as a model to discuss ecological principles as they apply to forest management. Students will gain a better understanding of Biological Organization and community classification, biotic and abiotic environmental factors, population and community ecology, and the role of disturbance in forested ecosystems. In addition, biogeochemical cycling, forest succession, and the role of natural selection will be discussed. Students will be expected to apply scientific principles and critical thinking skills to all lab activities and research papers. The lecture portion of this course may be offered in a distance education format.

AGNR 66 WATERSHED RESTORATION PRACTICUM - 1 Unit (formerly NR 66)
Grading: Pass/No Pass Option
Class Hours: 54 lab total
This course will use the hydrologic watershed unit as the focus which will provide a hands-on approach to ecosystem management, erosion control, sediment control, and stream restoration. The course will emphasize how restoring resource values requires an interdisciplinary scientific approach and community-wide participation to protect, enhance and restore. Note: Since subject matter varies each time the course is taught, based on the type and availability of community-based projects, this course may be repeated three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

AGNR 69 BIRDS AND THEIR HABITAT - 2 Units (formerly NR 69) Grading: Pass/No Pass Option
Note: Three eight-hour field trips will be a required part of this course.
Class Hours: 27 lecture/27 lab total
An introduction to the study of birds. Emphasis on the behavior, taxonomy, migration, orientation, flight, evolution, economic importance, and field identification of the birds. We will also study bird ecology and the role of birds in bio-diversity and ecosystems. Other topics covered are songs and calls, territory, courtship, nests and eggs, care of young, and the systems (reproductive, etc.) of birds.

## AGNR 70 WILDLIFE CONSERVATION AND MANAGEMENT - 3 Units (formerly NR 70)

Grading: Pass/No Pass Option
Note: Includes several all-day field trips
Class Hours: 36 lecture/54 lab total
The study of plant and animal ecology in relation to principles of wildlife management. An emphasis will be placed on identification of common western birds and mammals, sexing and aging criteria, wildlife population dynamics, wildlife habitat management, and a review of trapping and marking techniques. Ecological concepts such as biotic communities, succession, limiting factors, and predator-prey relationships will also be covered.

## AGNR 83 INTRODUCTION TO GLOBAL POSITIONING SYSTEMS (GPS) 1 Unit (formerly NR 83) <br> Class Hours: 9 lecture/27 lab total

This course is an introduction to theory and practice of geopositioning (GPS). Course will cover principles of geopositioning, including satellite systems, triangulation, accuracy and the configuration and use of GPS field devices. Students will gain experience in the use of both recreational grade and mapping grade GPS equipment for field navigation and data collection. The application of GPS to various fields and industries will be covered, from natural resources and agriculture to construction and infrastructure management.

## AGNR 94 NATURAL RESOURCES WORKSITE LEARNING - 1-8 Units (formerly NR 94)

Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## AGNR 97 SPECIAL TOPICS IN NATURAL RESOURCES - .5-2 Units (formerly NR 97)

Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in natural resources. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

AGNR 98 SPECIAL TOPICS IN AGRICULTURE-NATURAL RESOURCES LAB SKILLS - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics in a lab setting dealing with changing knowledge in natural resources. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

AGNR 173 BEGINNING TAXIDERMY - 2 Units (formerly NR 173)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
An introduction to taxidermy dealing with the taxidermy of birds. It will include collecting, materials and tools, preservatives, skinning, mounting and painting. Habitat materials and composition will be discussed and applied.

AGNR 174 INTERMEDIATE TAXIDERMY - 2 Units (formerly NR 174)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in AGNR 173
Class Hours: 18 lecture/54 lab total
An introduction to taxidermy of small mammals, reptiles and fish. Advanced techniques in bird taxidermy are also presented. Instruction will include game laws, tools and materials, skinning, tanning, mounting and display. A variety of artificial habitats will be employed. Students will supply their own specimens.

AGNR 176 WILDLIFE OF NORTHERN CALIFORNIA - 1 Unit (formerly NR 176) Grading: Pass/No Pass Option
Note: A weekend field trip to the Tulelake area will be required.
Class Hours: 9 lecture/27 lab total
Common species of wildlife found in Northern California will be observed and discussed. Habitat ecology and management along with regulatory and conservation issues will be covered in the class. Various identification tools, instructional aids, and other relevant materials will be reviewed and discussed. Note: This course may be repeated once for a total of two enrollments since course content varies and skills are enhanced by supervised repetition.

## AGNR 197 SPECIAL TOPICS IN NATURAL RESOURCES - .5-2 Units (formerly NR 197)

Grading: Pass/No Pass Only
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in natural resources. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## AG - PLANT SCIENCE (AGPS)

AGPS 20 PLANT SCIENCE - 4 Units (formerly AGRI 20)
Grading: Pass/No Pass Option
Note: Field trips to local areas will be included.
Class Hours: 54 lecture/54 lab total
An introduction to the biological principles of plant growth and development. Ecosystem relationships will be covered with particular emphasis on succession, water cycle, mineral cycle, and energy flow. In addition to the investigating modern production and marketing practices of agronomic crops, the impact of commercial crop production upon mankind and the environment will be considered.

## AGPS 24 SOILS - 3 Units (formerly ENVR 24, AGRI 24)

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher; and one year of high school chemistry or equivalent
Note: Class includes two Saturday field trips on classification, judging, and conservation of soils. This class is required for all agriculture, natural resources, and horticulture majors.
Class Hours: 36 lecture/54 lab total
This class is an introductory course on the physical, chemical, and biological properties of soil as it relates to agriculture and natural resources. Ecosystem relationship of soil use and management is emphasized. The effects of drainage, tillage, and irrigation on land use are discussed.

AGPS 25 CALIFORNIA WATER - 3 Units (formerly AGRI 25)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is an interdisciplinary examination of California's water use and management with a historical emphasis on the politics and conflict arising from water scarcity. Topics of water quality, water law, measurement of water, evaluation of irrigation methods and systems, and issues relating to water use will all be covered. This course may be offered in a distance education format.

AGPS 126 PESTICIDE TRAINING - 5 Unit (formerly AGRI 126, AGRI 126AD) Grading: Pass/No Pass Option

## Class Hours: 10 lecture total

This course is designed to meet the continuing education requirement for pesticide applicators and pest control advisors. The focus of the course is on methods and calculations necessary to apply pesticides safely, accurately and efficiently and to look at alternative techniques being used and developed for management of plant pests.

## AG - SUSTAINABLE AGRICULTURE (AGSA)

AGSA 50 AGRICULTURE RESOURCE MANAGEMENT - 3 Units (formerly AGRI 50)
Grading: Pass/No Pass Option
Class Hours: 36 lecture/ 54 lab total
A unique non-traditional land management class based on "sustainable," "regenerative," or "holistic" principles and practices. The total course will focus around the use of a "model" for making land management decisions for public and private lands. This class is appropriate for managing ranches and farms or for anyone interested in sustainable land management. Note: This course may be repeated one time for a total of two enrollments since course content varies and skills are enhanced by supervised repetition.

## AGSA 56 INTRODUCTION TO SUSTAINABLE AGRICULTURE AND FARM

 MANAGEMENT - 3 UnitsGrading: Pass/No Pass Option
Class Hours: 54 lecture total
This course explains the organization and operation of sustainable farm and ranch businesses, identifies factors affecting profitability, and evaluates the business for sustainability, increased efficiency and profit. Budgeting and resources management, farm operation analysis are applied to the Farm lab. Includes an examination of case studies to connect sustainable agriculture principles to actual farming practices.

## AG - VETERINARY SCIENCE (AGVETT)

AGVETT 1 VETERINARY ANATOMY, PHYSIOLOGY AND MEDICAL
TERMINOLOGY - 4 Units (formerly VETT 1, AGRI 62)
Class Hours: 54 lecture/54 lab total
This lecture and laboratory course is designed to introduce the first semester Veterinary Technology student to the comparative normal anatomy and physiology of selected domestic animal species. The eleven anatomical systems are covered and material presented ranges from the microscopic cellular level to the level of the full organism. Relevant application of structure and function to the clinical medical situations is addressed. Appropriate medical terminology is included with each system and animal dissection is completed by each student.

## AGVETT 2 FUNDAMENTALS OF ANIMAL HEALTH - 4 Units

 (formerly VETT 2, AGRI 63)Prerequisite: A grade of C or higher in AGVETT 1
Note: This course is for students enrolled in the fall semester of their first year in the Veterinary Technician Program.
Class Hours: 54 lecture/54 lab total
This introductory lecture course defines the role of the Animal Health Technician in private veterinary practice, research institutions, regulatory agencies and zoos. Topics covered include basic animal care and management, feeding species identifications, behavior, handling skills, animal restraint, sanitation, personal hygiene, study of pharmacological agents, drug use, actions and laws, emergency first aid, zoonotic disease risk factor, animal nursing skills, instruments and equipment, terminology, veterinary practice ethics and legal responsibilities.

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## AGVETT 4 VETERINARY RADIOLOGY AND IMAGING - 4 Units

(formerly VETT 4) - 1 Unit
Prerequisite: A grade of $C$ or higher in AGVETT 2
Class Hours: 9 lecture/27 lab total
Acquaints the student with the use of radiography, including radiographic duties of the Veterinary Technician curriculum. Special emphasis on medical, veterinary and radiographic terminology; elementary radiation and electrical protection; technical principles, and equipment operation. Fundamentals of latent and visible image formation, x-ray film characteristics, intensifying screens and film holders; theory and application of darkroom chemistry and processing; use and maintenance of veterinary x-ray processing equipment.

## AGVETT 5 VETERINARY ANESTHESIOLOGY, SURGICAL ASSISTING AND DENTISTRY - 4 Units (formerly VETT 5, AGRI 61) <br> Prerequisite: A grade of C or higher in AGVETT 2

Class Hours: 54 lecture/54 lab total
Includes lectures covering animal surgical and medical nursing techniques and dental hygiene. Procedures and techniques with intravenous and inhalation anesthetics, surgical asepsis, skin preparation, instrument sterilization techniques and monitoring patients for vital signs are presented. Anesthetic drugs are discussed according to classification, mode of action, method of action and method of administration.

## AGVETT 6 CARE OF EXOTIC AND LAB ANIMALS - 1 Unit

 (formerly VETT 6, AGRI 66)Prerequisite: A grade of $C$ or higher in AGVETT 2
Class Hours: 18 lecture total
This course will emphasize the necessary skills, and abilities required for a veterinary technician in laboratory animals. This theory should be complemented by an on-the-job training program working under the direct supervision of a California licensed veterinarian. This course is offered in partial fulfillment of the requirements to sit for the State Registry Exam via the Alternate Route.

## AGVETT 7 VETERINARY MEDICAL RECORDS - 1 Unit

Class Hours: 18 lecture total
This lecture course is designed to teach the veterinary technician the legal aspects of working in the veterinary hospital. This course will cover proper medical records, filing, and computer principles. The course focuses on the interaction between clients and staff, and obtaining an understanding of the human and animal bond, and its effects on people. OSHA requirements will be covered including developing and applying a proper safety plan. Stress and substance abuse will also be covered.

AGVETT 16 VETERINARY PRACTICES - 2 Units (formerly AGRI 16)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
An introduction to common veterinary practices, sanitation, and livestock disease endemic to Northern California. Special emphasis will be given to parasite control and preventive vaccination programs. Lab activities will include demonstrations and student participation in performing castration, worming, vaccinations, and animal handling and restraint procedures.

## AG - VITICULTURE (AGVIT)

AGVIT 80 VINEYARD DESIGN AND CONSTRUCTION - 1 Unit (formerly HORT 80)

## Grading: Pass/No Pass Option

Class Hours: 18 lecture/9 lab total
An introductory course in establishing a commercial or home vineyard. Numerous principles will be covered with respect to the design and construction of a vineyard. A vineyard will be utilized as a resource for this class.

AGVIT 81 VINEYARD CARE - 1 Unit (formerly HORT 81)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/9 lab total
This is an introductory course for the care and maintenance of wine grape vineyards. Both conventional and organic management methods will be discussed. This course would benefit students interested in both commercial production and home vineyard care.

## AGRICULTURE (AGRI)

See AG, AGAB, AGAS, AGEH, AGEQ, AGMA, AGNR, AGPS, AGSA, and AGVIT for course listings

## AMERICAN SIGN LANGUGE (ASL)

Two years of high school foreign language with grades of "C" or better is equivalent to one semester of foreign language at Shasta College.

## ASL 1 AMERICAN SIGN LANGUAGE 1 - 4 Units (formerly SL 90, SPED 93A)

Grading: Pass/No Pass Option
Corequisite: Concurrent enrollment in ASL 1L, or previous completion of ASL 1L with a grade of C or higher
Class Hours: 72 lecture total
Designed to introduce student to basic skills in American Sign Language vocabulary, finger spelling and grammatical structure. The student will gain the manual skills to engage in basic dialogue, visual cues and the receptive skills to understand general American Sign Language conversation. Topics include: American Sign Language as an independent language, the history of American Sign Language, the Deaf community and Deaf culture.

## ASL 1L AMERICAN SIGN LANGUAGE 1 SKILL-BUILDING LAB - 1 Unit (formerly SL 91, SPED 95A)

Grading: Pass/No Pass Option
Corequisite: Concurrent enrollment in ASL 1, or previous completion of ASL 1 with a grade of $C$ or higher
Class Hours: 54 lab total
This course is designed to give students a lab environment to practice basic American Sign Language skills. The course will review vocabulary, sentence structure and visual, non-manual behaviors from ASL 1 and give students a solid foundation in basic signing skills which will better prepare them for the next level of American Sign Language. The lab environment will provide visual structured activities. Most of class time will be non-verbal interactions. Note: This class may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

## ASL 2 AMERICAN SIGN LANGUAGE 2 - 4 Units <br> (formerly SL 92, SPED 93B) <br> Grading: Pass/No Pass Option

Prerequisite: A grade of C or higher in ASL 1
Corequisite: Concurrent enrollment in ASL 2L, or previous completion of ASL 2L with a grade of C or higher
Class Hours: 72 lecture total
This course is a continuation of ASL 1 and is designed to increase vocabulary and fluency in receptive and expressive skills of American Sign Language students. Emphasis is on the structure of American Sign Language including lexical, morphemic and syntactical elements. The student will gain the manual skills to engage in descriptive, complex dialog and stories at a moderate skill level. Topics include American Sign Language contrast and comparisons to other languages, language development and acquisition, and societal and legal issues.

## ASL 2L AMERICAN SIGN LANGUAGE 2 SKILL-BUILDING LAB - 1 Unit

 (formerly SL 93, SPED 95D)Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ASL 1L
Corequisite: Concurrent enrollment in ASL 2, or previous completion of ASL 2 with a grade of $C$ or higher
Class Hours: 54 lab total
This course is designed to give students a lab environment in which to practice new vocabulary and structures learned in ASL 2, and will review vocabulary, sentence structure and visual, non-manual behaviors learned from ASL 2. Students will be involved in structured class assignments in order to utilize signing skills and increase fluency to a moderate rate in preparation for success in ASL 3. Note: No verbal communication is allowed in lab. This course may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

## ASL 3 AMERICAN SIGN LANGUAGE 3 - 4 Units (formerly SL 94, SPED 93C)

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ASL 2
Class Hours: 54 lecture/54 lab total
This course is intended for students who plan to use American Sign Language in their daily lives. Success in this course will enable students to communicate with Deaf and Hard-of-Hearing individuals through sign language at an average rate of speed and build confidence in their use of the language. Students will study basic qualities and skills needed to interpret including topics such as the interpreting process, an overview of the NAD-RID Code of Professional Conduct, expectations, and simultaneous interpreting practice. Exposure to Deaf culture through class discussions and guest lecturers will be incorporated.

ASL 4 AMERICAN SIGN LANGUAGE 4 - 4 Units (formerly SL 96)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ASL 3
Class Hours: 54 lecture/54 lab total
This course is intended for students who plan to use American Sign Language in their daily lives. Success in this course will enable students to communicate with Deaf and Hard of Hearing individuals through sign language at an average rate of speed and build confidence in their use of the language, storytelling ability and presentation. Students will study qualities and skills needed to become interpreters. Students will be exposed to a variety of members and activities in the Deaf community.

## ASL 5 AMERICAN SIGN LANGUAGE 5: GRAMMAR - Units (formerly SL 7)

Prerequisite: A grade of C or higher in ASL 4
Class Hours: 72 lecture total
This course focuses on American Sign Language grammar and communication skills. ASL stories and literature are employed to give students the opportunity to learn and practice the rules of Deaf culture and the grammar of ASL. English grammar will be analyzed and the differences between the two languages discussed.

ASL 80 DEAF CHALLENGES - 3 Units (formerly SL 80)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course covers four areas that have a large impact on people's development: society, family, education, and work. Students are made aware of the challenges deaf people face in these areas and how it influences their lives. This course may be offered in a distance education format.

ASL 81 EDUCATIONAL WORLD OF THE DEAF - 3 Units (formerly SL 81) Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course focuses on the education of the deaf population from ancient times to the present. It addresses the cultural, physical and psychological effects on the way deaf people learn. Topics such as family relationships, cognitive development, and language acquisition are addressed. This course may be offered in a distance education format.

## ANATOMY (ANAT)

ANAT 1 HUMAN ANATOMY - 5 Units
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Note: May be taken concurrently with PHY 1
Class Hours: 54 lecture/54 lab/18 discussion total
A college level introductory course in human anatomy. A systematic hands-on approach to the anatomy of the human body. Human cadavers and/or mammalian dissection are used as a teaching resource. May be taken concurrently with PHY 1.

## ANTHROPOLOGY (ANTH)

ANTH 1 PHYSICAL ANTHROPOLOGY - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Topics include the theories of human origins and the evolution of life in general; classification of primates, introduction to living primates and primate behavior, genetics, population genetics, the fossil record, the evolution of hominid behavior, the evolution of language, environment and technology; hunting and the evolution of society; the evolution and condition of modern humans. This course may be offered in a distance education format.

ANTH 2 CULTURAL ANTHROPOLOGY - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introductory course exploring the nature of culture as the human adaptation to the natural world. It includes such topics as making a living, family structure, social organization and institutions, language, religion, art, and cultural change. This course may be offered in a distance education format.

## ANTH 5 HUMANITY, CULTURE, AND ECOLOGY - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An ecological perspective of cultures as adaptations to diverse habitats, and explorations of how these adaptations respond to environmental alterations. Emphasis will be placed on adaptative strategies and challenges in contemporary societies. This course may be offered in a distance education format.

ANTH 14 RELIGION, MYTH AND RITUAL - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280 or English Placement level 5 or higher Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A cross-cultural study of the forms and functions of religion, myth, and ritual in contemporary and historical societies. Emphasis will be on non-Western traditional groups and understanding their religious beliefs in a culturally relative context. This course may be offered in a distance education format.

## ANTH 25 CULTURE AND HISTORY OF THE NORTH AMERICAN INDIAN 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A course dealing with the history and culture of the North American Indian. Emphasis will be on the origins, spread and diversification, and the development of Native American cultures in North America. Additional emphasis will be on contemporary Native Americans. Consideration will be given to how the arts, economics, and cultural contributions of Native Americans have influenced the modern world. This course may be offered in a distance education format.

## ARCHAEOLOGY (ARCH)

## ARCH 3 PRINCIPLES OF ARCHAEOLOGY - 3 Units

Class Hours: 54 lecture total
An introductory course to the study of world prehistory and historical archaeology through the analysis of archaeological method, theory, and regional developments. The course includes case study examination of the fundamental concepts of archaeology and the changing theoretical orientations of archaeology in the contemporary world.

ARCH 4 FIELD ARCHAEOLOGY - 3 Units (formerly ARCH 4AD)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/108 lab total
An introductory course in the practical application of archaeological principles and methods. Students will become familiar with the basic techniques of scientific archaeological excavation and site survey, mapping, photographing, data recording, cataloging and preservation of archaeological specimens. Note: This course may be repeated three times for a total of four enrollments, since course content varies and skills are enhanced by repetition and practice. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ARCH 5 LABORATORY AND FIELD METHODS IN ARCHAEOLOGY . 5 - 2 Units (formerly ARCH 5AD)

Class Hours: 27-108 lab total
This is a course that emphasizes both the field aspects of archaeology coupled with post-field laboratory analysis and data interpretation. Method and theory of both field survey, excavation and recording and post-field data processing and curation and subsequent interpretation and explanation will be the class focus. Some work may require overnight stays. Students will assume positions of crew chiefs, laboratory chiefs, mappers, camp organizers, etc. under the instructor's direction. Students will participate in preliminary site analysis, interpretive projects, and cultural material processing. Note: This course may be repeated three times for a total of four enrollments, since course content varies and skills are enhanced by repetition and practice. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ART (ART)

ART 1 INTRODUCTION TO ART - 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A basic course in the visual arts including architecture, craft, graphics, painting and sculpture. Historical periods and the artist's role in society are covered in the Stone Age, Middle Ages, Renaissance, Baroque, Classical, Romantic, Impressionism, and Twentieth Century. Fundamental concepts of line, color, value, texture, form and space are examined by two and three dimensional examples. Recommended for Humanities elective. This course may be offered in a distance education format.

## ART 2 HISTORY OF WESTERN ART THROUGH THE GOTHIC PERIOD 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A historical survey course of the visual arts including architecture, crafts, engraving, etching, graphics, painting, sculpture, and woodcuts. Historical periods covered are Stone Age, Egyptian, Mesopotamian, Aegean, Greek, Etruscan, Roman, Byzantine, Christian, Medieval, Romanesque, and Gothic. ( 30,000 B.C. - 1400 A.D.) This course may be offered in a distance education format.

ART 3 WESTERN ART, RENAISSANCE TO CONTEMPORARY - 3 Units Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A historical survey course of the visual arts from the Renaissance through the contemporary periods in history, with emphasis on painting, sculpture and architecture. This course may be offered in a distance education format.

## ART 4 WORLD ART - 3 Units

Class Hours: 54 lecture total
A survey of the visual arts of ethnic and indigenous cultures with an emphasis on both historic and contemporary art. Explored are the Americas, Africa, India, Japan and China. Lectures are focused on the styles, motifs, symbols, rituals and traditions of the cultures by examining their crafts, drawings, sculpture, printmaking and paintings. This course is designed as a Humanities elective, recommended for Art Core Programs, and required for the Art History Concentration

## ART 6 HISTORY OF MODERN ART - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An in-depth study of visual expression since 1860, starting with pre-Impressionist stirring and tracing the development of modernism through significant art movements in the 20th Century. This course may be offered in a distance education format.

## ART 12 BEGINNING FORM, DESIGN AND COLOR - 3 Units

 (formerly ART 14A)Grading: Pass/No Pass Option
Class Hours: 36 lecture/72 lab tota
A fundamental course in two-dimensional design and color theory with the study of basic design elements as they apply to form. Two-dimensional design includes balance, directional movements, structural analysis, texture and unity. Color theory includes color schemes, psychological use of color, and value and intensity concepts. Required for the Art Core Program, and recommended for theatre, architecture and graphic design studies.

## ART 13 INTERMEDIATE FORM, DESIGN AND COLOR - 3 Units <br> (formerly ART 14B) <br> Grading: Pass/No Pass Option

Prerequisite: A grade of C or higher in ART 12
Class Hours: 36 lecture/72 lab total
An interpretative course using two-dimensional form concepts and color theory with the application to three-dimensional form. The development of personal ideas and direction, the use of scale, surface effects, and new materials (synthetics). More concern is given to presentation, focus and consistency.

ART 15 THREE DIMENSIONAL DESIGN - 3 Units (formerly ART 15AB) Note: Field trips may be required
Class Hours: 36 lecture/72 lab total
A hands-on studio art course using the elements and principles of three-dimensional design in the creation of form and space relationships. This course provides students with the fundamental design and problem solving skills that apply to the fields of three-dimensional art, architecture, landscape, interior and industrial design. This course may be repeated once for a total of 2 enrollments since course content varies and skill development is enhanced with a successive enrollment.

## ART 16 PENCIL RENDERING - 2 Units (formerly ART 16AB)

Class Hours: 18 lecture/ 54 lab total
A fundamental course to prepare pictorial presentation applicable to advertising, architectural and industrial design, landscapes and illustrations using mechanical perspective and rendering media. Course designed for Architectural majors and recommended for Art majors. Note: This course may be repeated once for a total of two enrollments since course content varies and skill development is enhanced with a successive enrollment.

## ART 17 SHADES, SHADOWS, AND PERSPECTIVES 3 Units (formerly ART 17AD)

## Grading: Pass/No Pass Option

Class Hours: 36 lecture/72 lab tota
A basic course in the use of various perspective techniques, using one and two point as well as grids. This course is designed for Art, Architecture, Graphic Design and Landscape Architecture students. It involves developing three-dimensional drawings of building structures, objects, etc., using perspective techniques and adding value rendering as well as shadows to create finished work. Note: This course may be repeated once for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ART 21A BEGINNING FREEHAND DRAWING - 3 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture/72 lab tota
An introductory course in the basic methods and tools of drawing using idea and technical development. A variety of materials will be used for this purpose. Course is required for Art Core Program.

ART 21B INTERMEDIATE FREEHAND DRAWING - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of $C$ or higher in ART 21A
Class Hours: 36 lecture/72 lab total
A developmental course designed to expand upon the information and techniques learned in 21A. Greater concern for personal idea development, consistency and presentation techniques. More information given on paper and its manufacture, drawing materials and the techniques of developing a professional portfolio. A variety of materials will be used for this purpose.

## ART 23 PEN, BRUSH AND INK (formerly ART 23AB) - 2 Units

Class Hours: 18 lecture/54 lab total
Exploring 2D possibilities with a variety of pens, brushes, inks, and papers. Exercises are based in observation and imagination, with supporting foundational drawing practice. Exposure to artists using this medium, and to links between illustration and fine art. Note: This course may be repeated once for a total of two enrollments, since skill development is enhanced with a successive enrollment.

## ART 26 BEGINNING WATERCOLOR PAINTING - 3 Units

(formerly ART 26AB)
Grading: Pass/No Pass Option
Class Hours: 36 lecture/72 lab total
An introductory course in watercolor painting methods as they apply to the visual arts. Methods covered include wet wash, wash, stroke and glaze overlays, with emphasis on creative interpretation and expression. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

## ART 27 INTERMEDIATE WATERCOLOR PAINTING - 3 Units

 (formerly ART 26CD)Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in two semesters of ART 26
Class Hours: 36 lecture/72 lab total
A developmental course designed to expand upon the information and techniques learned in ART 26. General attention will be given to personal idea development, consistency, presentation techniques and working with more independence. The student will be expected to increase quality and number of paintings completed during the semester. The student will also learn to develop a professional portfolio and to communicate professionally. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

## ART 29 BEGINNING PAINTING - 3 Units (formerly ART 25AB)

Class Hours: 36 lecture/72 lab total
A creative course in the use of oil, polymer, and other synthetic media on canvas, hardboard, or metal. Application of these media and other media use in representation and abstract form. Course designed for Painting Concentration. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 30 INTERMEDIATE PAINTING - 3 Units (formerly ART 25CD)
Prerequisite: A grade of $C$ or higher in two semesters of ART 29
Class Hours: 36 lecture/72 lab total
A developmental course designed to expand upon the information and techniques learned in ART 29-Beginning Painting. General attention will be given to personal idea development, consistency, presentation techniques and working with more independence. The student will be expected to increase quality and number of paintings completed during the semester. The student will also learn to develop a professional portfolio and to communicate professionally. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 31 BEGINNING FIGURE DRAWING - 3 Units (formerly ART 22AB) Class Hours: 36 lecture/72 lab total
An introductory course in creative drawing of the nude human figure. Emphasis will be placed on anatomy, proportion, composition, and development of personal expression. Course required for Art Core Program. Note: This course may be repeated once for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ART 32 INTERMEDIATE FIGURE DRAWING - 3 Units (formerly ART 22CD) Prerequisite: A grade of C or higher in two semesters of ART 31
Class Hours: 36 lecture/72 lab total
A developmental course designed to expand on information and techniques learned in ART 31-Beginning Figure Drawing. Attention will be given to the development of a more personal interpretation of the figure, technique, consistency, presentation and the resolution and execution of ideas with greater independence. The student will produce and critically discuss increasingly sophisticated works which will become part of his/her professional portfolio. Note: This course may be repeated once for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ART 35 BEGINNING CERAMICS - 3 Units (formerly ART 35AB)
Grading: Pass/No Pass Option
Note: Field trips may be required
Class Hours: 36 lecture/72 lab total
An introductory course developing skills in hand-building with coils, slabs, and the use of the potter's wheel. The course includes glazing, decorative techniques, properties of clay and firing of ceramic forms. Note: This course may be repeated once for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ART 36 INTERMEDIATE CERAMICS - 3 Units (formerly ART 35CD) Grading: Pass/No Pass Option
Prerequisite: A grade of $C$ or higher in ART 35
Note: Field trips may be required
Class Hours: 36 lecture/72 lab total
This is an intermediate ceramics course emphasizing studio problems which involve the potter's wheel, construction of molds and more advanced hand-building techniques. Note: This course may be repeated once for a total of two enrollments (6 units) since course content varies and skills are enhanced by supervised repetition and practice.

ART 45 BEGINNING GLASS - 3 Units (formerly ART 45AB)
Grading: Pass/No Pass Option
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
This class is a hands-on course to explore the beginning aspects of the art of working with glass in its molten and frozen states. Students will develop an understanding of the wide range of possibilities that exist when working with glass. Through demonstrations and practice in the hot shop, students will acquaint themselves with the tools and materials needed to create forms in glass. Students will begin a hands-on involvement with molten glass working, ladle sand casting, kiln casting and other glass processes. Working with clear glass, students will develop basic glass blowing skills by learning how to form simple blown shapes such as the sphere, cylinder, disk and various vessel forms. Individual student skills will be emphasized. Open to students in all disciplines; no prior glassblowing experience necessary. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 46 GLASS BLOWING - 3 Units (formerly ART 45CD)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 45 or ART 57
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
This course focuses on skills progression in working with glass in the molten state. Emphasis is placed upon individualized projects for students. Students will work with studio equipment related to recycling, melting, firing and annealing of glass. This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

## ART 50 PRINTMAKING - 3 Units (formerly ART 50AD)

Grading: Pass/No Pass Option
Class Hours: 36 lecture/72 lab total
An introductory course surveying printmaking processes as they apply to the visual arts. Studio experience will focus on one or two of the following techniques each semester: relief, intaglio, stencil (serigraph) and/or planography (monotype lithography) printmaking. The creation of relief, stencil, intaglio and planography prints will be discussed and demonstrated. Note: This course may be repeated two times for a total of 3 enrollments since course content varies and skills are enhanced by supervised repetition and practice.

## ART 55 BEGINNING SCULPTURE - 3 Units (formerly ART 55AB)

Advisory: A grade of $C$ or higher in one semester of ART 15
Note; Field trips may be required
Class Hours: 36 lecture/72 lab total
A creative course in the sculpting of wood, plastics, plaster, and other materials. Application of these media are used in abstract and representational forms. Course designed for the Art Core program. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 56 INTERMEDIATE SCULPTURE - 3 Units (formerly ART 55CD) Prerequisite: A grade of $C$ or higher in two semesters of ART 55 Note: Field trips may be required
Class Hours: 36 lecture/72 lab total
This course is designed to expand upon the information and techniques learned in ART 55, Beginning Sculpture. General attention will be given to personal idea development, consistency, presentation, techniques and working with more independence. The student will be expected to increase quality and size of sculpture pieces during the semester. The student will also learn to develop a professional portfolio and to communicate professionally. This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

## ART 57 SCULPTURAL GLASS - 3 Units

Advisory: A grade of $C$ or higher in ART 45 or ART 55
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
A structured intermediate sculpture course in which students will develop an understanding of the potential of the medium of glass in its molten and frozen states. Students will begin a hands-on involvement with molten glass working, ladle sand casting, kiln casting and other glass processes. Regular demonstrations, presentations and in-class projects as well as individual assignments will establish a fundamental knowledge and physical understanding of glass as a medium for sculpture.

## ART 60A BASIC PHOTOGRAPHY AND DARKROOM - 3 Units

 (formerly ART 60AB)Grading: Pass/No Pass Option
Note: This is a film based class; students must provide their own 35mm camera with adjustable shutter and aperture.
Class Hours: 27 lecture/81 lab total
An introductory course presenting the origins and history of photography, camera and lens familiarization, exposure, metering, film development, printing procedures, print presentation, composition and standards of quality. Emphasis is placed on black and white negative and print quality along with content, composition and personal expression.

## ART 61 BEGINNING CREATIVE PHOTOGRAPHY - 3 Units (formerly ART 61A)

Grading: Pass/No Pass Option
Note: This is a film based class; students must provide their own 35mm camera with adjustable shutter and aperture.
Class Hours: 27 lecture/81 lab total
A course that concentrates on expressive and aesthetic aspects of photography in fine art. Emphasis will be placed on camera use, composition, film exposure and darkroom techniques to achieve artistic effect.

## ART 62 INTERMEDIATE CREATIVE PHOTOGRAPHY - 3 Units (formerly ART 61BD)

Grading: Pass/No Pass Option
Prerequisite: A grade of $C$ or higher in ART 60A or a grade of $C$ or higher in ART 61 Note: This is a film based class; students must provide their own 35mm camera with adjustable shutter and aperture.
Class Hours: 27 lecture/81 lab total
A continuation of techniques covered in ART 61. Emphasis will be on negative quality, the fine print and presentation. On-going study will concentrate on creative development of the personal idiom in creation of a portfolio, aesthetics and critical thought process. Note: This course may be repeated two times for a total of three enrollments since skills are enhanced by supervised repetition and practice.

## ART 70 INTRO. TO DIGITAL PHOTOGRAPHY - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ART 61
Note: It is recommended that students have a 7 megapixel (or larger) digital camera with manual aperture and shutter controls. It would be helpful if the student has basic skills in Adobe Photoshop.
Class Hours: 27 lecture/81 lab total
An introductory course in digital imaging and technology commonly used by photographers. Art and design principles, basic photography formats, composition and lighting in digital image making will be discussed and explored. Adobe PhotoShop may be used in developing and manipulating digital images. Note: This course may be repeated once for a total of two enrollments since skill development is enhanced with a successive enrollment.

ART 71 INTERMEDIATE DIGITAL PHOTOGRAPHY - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ART 70
Note: It is recommended that students have a 7 megapixel (or larger) digital camera with manual aperture and shutter controls. It would be helpful if the student has basic skills in Adobe Photoshop.
Class Hours: 27 lecture/81 lab tota
A continuation and advancing of the principles covered in ART 70 with emphasis on artistic expression and use of current technologies.

## ART 80A GRAPHIC DESIGN - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ART 12
Note: It would be helpful if the student has basic skills in Adobe Photoshop. Class Hours: 27 lecture/81 lab total
The course provides the student with an introduction to the theories and applications behind typography, color theory, layout, and composition. The student will learn and use industry standard image editing and page layout software to produce class assignments typically encountered in the graphic design and printing industries.

ART 80B INTERMEDIATE GRAPHIC DESIGN - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 80A
Class Hours: 27 lecture/81 lab total
This course builds on the software training and design concepts from 80A to teach the student more advanced image editing, document composition, and digital illustration techniques using industry standard software and accepted design practices and advanced theories and principles.

ART 97 SPECIAL STUDIO ART TOPICS - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students studio-based instruction and experience in a variety of art processes not regularly covered in other art classes. A different topic/process will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Art majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ART 98 SPECIAL ART TOPICS - .5-2 Units

Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This non-studio course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge and contemporary and historical issues in the field of art. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Art majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

THE 100 SERIES OF COURSES ARE SPECIFIC SUBJECT AREAS TAKEN FROM THE TRANSFER (1-98) COURSES AS SHORT-TERM INTRODUCTION COURSES:

ART 110 MIXED MEDIA: WORKS ON PAPER - 2 Units
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
This course selectively and aesthetically combines various media and techniques of drawing, painting, photo, printing and collage into two-dimensional works. Underlying the instruction is a historical component which emphasizes modern and contemporary art to broaden the students' interest and awareness of contemporary trends. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ART 121 ILLUSTRATION (formerly ART 121W) - 2 Units

Grading: Pass/No Pass Option
Class Hours: 18 lecture/ 54 lab total
Designed to develop a personal approach to the problems of pictorial elucidation and provides an understanding of the use of visual media to illustrate verbal content. It develops a knowledge of the more common graphic media and of design elements in relationship to illustration. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ART 122 PORTRAIT PAINTING - 2 Units (formerly ART 125W)

Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab tota
A basic course in the materials, tools, composition, proportion, lighting, shadow patterns, anatomy, value, color, line and study of other masters in portrait painting. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ART 123 LANDSCAPE PAINTING - 2 Units (formerly ART 125X)

Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
A basic course to introduce the techniques of landscape painting, specifically the areas of pictorial materials, space, simple perspective, composition, value, color, scale, texture, line, and the study of other landscape painters. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ART 124 INTRODUCTION TO PAINTING - 2 Units (formerly ART 125Y) Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
Designed as an introductory segment to the practice and theory of painting. This course will focus upon those aspects of pictorial organization employed in the formation of representational painting. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ART 125 INTRODUCTION TO WATERCOLOR - 2 Units (formerly ART 126W) Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
A preliminary course in watercolor methods, such as wet wash, stroke and glaze overlays, with emphasis on creative interpretation of the environment. Note: This course may be repeated three times for a maximum of four enrollments since skills are enhanced by supervised repetition and practice. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ART 126 NATURE IN WATERCOLOR - 2 Units (formerly ART 126X)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
An extensive course in different watercolor methods, such as: wet wash, stroke, and glaze overlays, with emphasis on creative interpretation of subjects in nature. Note: This course may be repeated three times for a maximum of four enrollments since skills are enhanced by supervised repetition and practice. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ART 301 BEGINNING, INTERMEDIATE AND ADVANCED DRAWING \& PAINTING-MIXED MEDIA - 0 Units

Class Hours: 6-108 lab total
An introductory, intermediate and advanced course incorporating basic drawing techniques using a variety of pencils and covering composition, color mixing, brush strokes, watercolor, acrylic, oil and pastels. The course is designed to provide stimulation and growth for individual adults through art activities.

ART 302 ART EXPRESSION FOR SENIORS - 0 Units
Class Hours: 6-108 lab total
Come and express yourself in colorful explorations. "Draw" upon your life experiences: your memories, dreams and reflections. Learn to create designs and images using paints, watercolor crayons, collage, colored pens/pencils, ink, pastels, fiber and clay. Course designed for older adults, no previous art experience is necessary.

## ASTRONOMY (ASTR)

ASTR 1 ASTRONOMY - 3 Units (P/NP Option)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A survey course designed to introduce the science of astronomy. This course covers aspects of archaeoastronomy, telescope optics, radio astronomy, prominent scientists, planets and moons, the sun, stars, stellar evolution and galaxies. This course may be offered in a distance learning format.

## AUTOMOTIVE TECHNOLOGY (AUTO)

NOTE: STUDENTS MUST PROVIDE THEIR OWN HAND TOOLS FOR TECHNICAL CLASSES IN THE DIESEL TECHNOLOGY AND AUTOMOTIVE TECHNOLOGY MAJORS IN ORDER TO COMPLETE REQUIRED COURSE OBJECTIVES.
AUTO 150, AUTO 152, AUTO 180 and AUTO 180 courses are now under Industrial Technology (INDE)

AUTO 1 VEHICLE ELECTRICAL SYSTEMS - 3 Units
Class Hours: 36 lecture/72 lab total
Designed to cover the basic theory of electricity and magnetism, as well as areas of operation, testing, and service of vehicle batteries, switches, relays, starters and starting systems, alternators, regulators, charging systems, and light circuits. The course includes electrical theory, repair procedures, and ASE laboratory tasks. This course, along with AUTO 10, is designed to prepare students to become ASE certified in area A-6. Required for Automotive majors with emphasis on electrical systems.

AUTO 10 AUTOMOTIVE ELECTRONICS - 3 Units (formerly AUTO 110)
Prerequisite: A grade of C or higher in AUTO 1
Class Hours: 36 lecture/72 lab total
This course is designed to establish an understanding of electronic theory and solid state technology as it applies to the automobile. The student will learn to read wiring schematics, calculate voltages, current flow, and resistances within parallel and series circuits, and to properly use related testing equipment used for diagnosis. This course includes electrical/electronic theory, repair procedures, and ASE
laboratory tasks. This course, along with AUTO 1, is designed to prepare students to become ASE certified in area A-6.

AUTO 20 ENGINE PERFORMANCE - 4 Units
Class Hours: 36 lecture/108 lab total
This course is designed to give students the understanding of the operation of automotive engines and related systems such as electrical, ignition and fuel delivery. The course will also provide students with entry level skills to diagnose, service and repair these systems using current industry tools and equipment. This course includes ASE laboratory tasks and is designed to prepare students to become ASE certified in area A-8.

## AUTO 21 ADVANCED ENGINE PERFORMANCE - 3 Units

Prerequisite: A grade of C or higher in AUTO 20
Class Hours: 36 lecture/72 lab total
This course is designed to continue the study of engine performance by including the emission control systems and computer controlled engine operation. The course will also provide students with entry level skills to diagnose, service and repair these systems using current industry tools and equipment. This course includes ASE laboratory tasks and, along with AUTO 20, is designed to prepare students to become ASE certified in areas A-8 and L-1.

AUTO 94 WORKSITE LEARNING FOR AUTOMOTIVE TECH. - 1-8 Units Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## AUTO 130 AUTOMOTIVE STEERING AND SUSPENSION - 3 Units

Class Hours: 36 lecture/54 lab total
This course is designed to give students the entry level skills required to diagnose, service, and repair modern automotive wheel and tire, steering, and suspension systems. The course includes theory of operation, repair procedures, and ASE laboratory tasks. This course, along with AUTO 131, is designed to prepare students to become ASE certified in area A-4.

AUTO 131 AUTOMOTIVE WHEEL ALIGNMENT - 2 Units
Prerequisite: A grade of C or higher in AUTO 130
Class Hours: 18 lecture/54 lab total
This course is designed to give students the entry level skills required to perform complete four-wheel alignments on modern automobiles and light trucks. The course includes theory of alignment principles and the operation of industry standard alignment equipment. This course, along with AUTO 130, is designed to prepare students to become ASE certified in area A-4.

## AUTO 147 AUTOMOTIVE BRAKING SYSTEMS - 3 Units

Class Hours: 36 lecture/72 lab total
This course is designed to provide the entry level skills needed to diagnose, service, and repair various braking systems found on domestic and import automobiles and light trucks. The course includes brake theory, repair procedures, and ASE laboratory tasks, and is designed to prepare students to become ASE certified in area A-5. Standard and power assist, drum and disc type systems and anti-lock braking systems are included in this course.

## AUTO 161 MANUAL DRIVE TRAIN AND AXLES - 3 Units

Class Hours: 36 lecture/72 lab total
A course designed to give a technical and working knowledge of manual drive trains and axles. Subject matter covered includes clutch diagnosis and repair, manual transmission diagnosis and repair, transaxle diagnosis and repair, drive (half) shaft and universal joint diagnosis and repair, rear axle diagnosis and repair, four-wheel drive component diagnosis and repair, theory of operation, repair procedures, and ASE laboratory tasks. This course is designed to prepare students to become ASE certified in area A-3.

AUTO 162 AUTOMATIC TRANSMISSIONS AND TRANSAXLES - 4 Units Class Hours: 36 lecture/108 lab total A course designed to give a working knowledge of automatic transmissions and transaxles. Subject matter covered will include transmission/transaxle maintenance and adjustment, in-vehicle transmission/transaxle repair, and off-vehicle transmission/transaxle repair. The course includes theory of operation, repair procedures, and ASE laboratory tasks. This course is designed to prepare students to become ASE certified in area A-2.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.

AUTO 163 HEATING, AIR CONDITIONING AND ACCESSORIES - 3 Units Class Hours: 36 lecture/54 lab total
This course is designed to give students a technical and working knowledge of automotive heating and air conditioning systems. Emphasis is placed on entry level skills necessary for diagnosing, servicing, and repairing modern automotive heating and air conditioning systems. The course includes theory of operation, repair procedures, and ASE laboratory tasks. This course is designed to prepare students to become ASE certified in area A-7.

AUTO 164 ADVANCED TOPICS IN AUTOMATIC TRANSMISSIONS - 2 Units Class Hours: 18 lecture/54 lab total
A course designed to give a working knowledge of electronic automatic transmissions and transaxles. Subject matter covered includes a review of hydraulic and electronic principles, in-vehicle transmission/transaxle diagnosis and repair, and off-vehicle transmissions/transaxle repair. The course includes theory of operation, repair procedures, and use of diagnostic equipment necessary for problem solving on the modern electronic transmissions and transaxles. Also covered will be applications for automatic transmissions in the area of high performance vehicles.

## AUTO 170 AUTOMOTIVE SERVICE PRINCIPLES - 2 Units

Class Hours: 18 lecture/54 lab total
This course is designed as an introduction to the modern automobile with a focus on maintenance and service procedures. Emphasis will be placed on safety, consumer awareness, tool usage, and vehicle systems. Students will be required to provide a vehicle on which to perform the maintenance and service procedures and will need to have the necessary owners manual or service manual for that vehicle.

AUTO 172 BASIC AREA CLEAN AIR CAR COURSE - 3 Units Class Hours: 36 lecture/72 lab total
This course is designed to prepare students for entry into the Bureau of Automotive Repairs Smog Check Program. Successful completion of this course will allow any student to apply for an interim smog license. Before taking the ASE certification tests A6, A8 and L1, it is highly recommended that students complete the requirements for an Engine Performance Certificate. ASE Certification in areas A-6 and A-8 will be required by the Bureau for application for a Basic Smog License Exam and ASE Certification in areas A-6, A-8 and L-1 for application for the Advanced Smog License Exam.

AUTO 197 SPECIAL TOPICS IN AUTOMOTIVE TECHNOLOGY - .5-2 Units Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of Automotive Technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Automotive majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## BIOLOGICAL SCIENCES (BIOL)

BIOL 1 PRINCIPLES OF BIOLOGY - 4 Units
Prerequisite: A grade of C or higher in CHEM 1A
Class Hours: 36 lecture/108 lab total
A biological science emphasizing molecular and cellular organization, energetics of respiration and photosynthesis, cell integration and development. General principles of heredity, evolution, speciation and ecology. Intended for majors in science.

## BIOL 5 INTRODUCTION TO HUMAN BIOLOGY - 3 Units

Class Hours: 54 lecture total
A one-semester introductory course in human anatomy and physiology presented with a medical emphasis. Selected topics on eleven organ systems are covered. This course is intended to serve medical assistants, licensed vocational nursing, and fire science majors. It also complements child development and nutrition majors. BIOL 5 is a prerequisite for the LVN program.

BIOL 6 INTRO. TO HUMAN BIOLOGY LABORATORY - 1 Unit
Corequisite: Student must be concurrently enrolled in, or have completed BIOL 5 with a grade of C or higher
Class Hours: 54 lab total
A laboratory course designed to complement BIOL 5. A one-semester human anatomy and physiology laboratory course. Exercises include anatomical language, microscopy, membrane transport processes, skeletal muscle contraction, cardiology, blood pressures, pulmonary ventilation, and enzymatic digestion. The anatomy of eleven organ systems is also included. BIOL 6 is a prerequisite for the LVN program.

BIOL 10 GENERAL BIOLOGY - 4 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture/54 lab total
This course is an introduction to the major concepts of modern biology. Topics covered include cell biology, heredity and nature of genes, evolution, diversity of life, and principles of ecology. Emphasis will be placed on those aspects of biology that are rapidly reshaping our culture. This is an approved general education course for non-life science majors who desire an introductory biology course with laboratory.

BIOL 11 DIVERSITY OF LIFE - 3 Units
Grading: Pass/No Pass Option
Class Hours: 162 total hours
This course is a 3-unit, transferable, non-laboratory, computer-based life science course. It is available only on the Internet and is intended for those people who, for one reason or another, cannot come to the Shasta College campus for course work. Topics include molecular and cell biology, inheritance, gene expression, mutation, evolution and the diversity of living organisms.

BIOL 12 FIELD BIOLOGY - 3 Units
Class Hours: 36 lecture/54 lab total
Plant and animal morphology, classification and ecological relationships examined through field and laboratory study. Principles of ecology illustrated in the context of biotic communities of Northern California.

BIOL 14 HEREDITY - 3 Units (formerly PHY 10)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introduction to the biological, medical and environmental basis of man's inheritance. This course may be offered in a distance education format.

BIOL 15 ENTOMOLOGY - 3 Units
Class Hours: 36 lecture/54 lab total
An introduction to the study of insects, their biology, anatomy, classification, and relation to human welfare.

## BIOL 30 NATURE PHOTOGRAPHY - 1 Unit

Grading: Pass/No Pass Option
Note: Students must provide a camera, film, and processing
Class Hours: 9 lecture/27 lab total
Methods and techniques used in nature photography. Includes, micro, macro, wide angle, normal and telephotography.

BIOL 60 BIOLOGY OF AGING - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course examines processes and responses of the individual during the aging process. Emphasis will be on the difference between normal aging in the absence of disease and aging with disease. Topics include: mental health, mental disease, sexuality, physical aspects of aging, acute illness, chronic illness, dying, and theories of aging.

## BOTANY (BOT)

## BOT 1 GENERAL BOTANY - 4 Units

Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Class Hours: 36 lecture/108 lab total
An introduction to the structure, physiology, reproduction, life cycles and taxonomic of major plant and plant-like groups.

BOT 50 WILDFLOWERS OF CALIFORNIA - 1 Unit
Grading: Pass/No Pass Option
Note: Two all-day Saturday field trips will be required.
Class Hours: 18 lecture /11 lab total
Local wildflowers are examined closely in the laboratory in order to learn their structural characteristics. This knowledge will be used to identify flowers using a plant identification key and for sight identification. The field trips reinforce identification skills by allowing students to observe these flowers in their natural setting. A supplementary course for botany, biology, forestry, ornamental horticulture, and natural resources students; elementary and high school teachers; and general interest. Five three-hour class meetings and two all day Saturday field trips.

## BOT 52 MUSHROOM IDENTIFICATION - 2 Units

Grading: Pass/No Pass Option
Note: Includes two local mushroom collection field trips
Class Hours: 27 lecture / 27 lab total
In this course, students will learn to identify mushrooms and other fungi of Northern California. Class discussions will cover mushroom biology, the groups of fungi, mushroom structure, recognizing mushrooms by sight, and identifying mushrooms using written mushroom identification keys. Field trips will reinforce identification skills and help students understand the role of mushrooms in the ecosystem. There will be special emphasis on mushroom poisons and consumer safety.

## BUSINESS ADMINISTRATION (BUAD)

See Also: ACCT, CIS, MKTG, OAS
BUAD 6 BUSINESS LAW - 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course primarily involves the legal ramifications of business and personal conduct in the areas of business contracts and agency. In addition, it includes an introduction to the American legal system, alternative dispute resolution, business torts and ethics. This course may be offered in a distance education format.

BUAD 8 BUSINESS LAW - 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course involves the various parameters and requirements of business organizations, security devices, bankruptcy with personal and intellectual property issues. This course may be offered in a distance education format.

BUAD 10 INTRODUCTION TO BUSINESS - 3 Units
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A survey course for both business and non-business majors covering the different disciplines (finance, management, and marketing) of business. The course also covers the complexities of the competitive business world and includes additional disciplines such as international business, forms of business ownership, social responsibility and ethics, and entrepreneurship. Designed to provide students with familiarity with basic principles and practices of contemporary business, knowledge of business terminology, and an understanding of how business works within the U.S. economic system. Due to its introductory nature, it is recommended that this course be taken as a first business course. This course may be offered in a distance education format.

BUAD 12 INTERNATIONAL BUSINESS - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in BUAD 10, and a grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introduction to the essentials of international business and the environmental forces that impact on the managerial decision process. Gives an overview of global business with emphasis on cultural differences and global business concepts and issues influencing international business decision-making. Course examines the physical, financial, political, legal, competitive, labor, marketing, economic, and sociocultural constraints and opportunities of foreign market analysis and trade management. This course may be offered in a distance education format.

BUAD 15 BUSINESS AND SOCIETY - 3 Units
Class Hours: 54 lecture total
The purpose of this course is to increase the student's awareness of ethical issues in business. The course establishes a framework and definition of ethics and the interaction among business, government, and society. Examples from current events and across business disciplines will be used. Opposing points of view will be presented allowing the student to make individual judgments about ethical behavior in business and what things can and should be done to create a sustainable business model for the future.

BUAD 40 ENTREPRENEURSHIP AND SMALL BUSINESS - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is an entrepreneurial perspective of starting a small business. The course covers techniques and methods of starting and managing a small business enterprise and incorporates the exploration of a sound business plan that includes a financial, management, and marketing analysis. This course may be offered in a distance education format.

## BUAD 41 LEADERSHIP \& SUPERVISION - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course focuses on the role of the first-line supervisor in the organization. There is particular emphasis on team building, coping with organizational change, leadership styles, motivating employees, and the supervisor's role in monitoring the primary management functions of planning, organizing, directing and controlling. This course may be offered in a distance education format.

BUAD 42 FINANCING A SMALL BUSINESS - 3 Units
Grading: Pass/No Pass Option
Advisory: Students will need to have access to and a working knowledge of Microsoft Excel.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A course designed to give an understanding on the various ways of funding a business venture. The course explores how to raise money for growing or starting a
small business by reviewing sources of public and private debt, equity capital, Initial Public Offering, commercial loans and SBA-guaranteed programs. This course may be offered in a distance education format.

## BUAD 43 INTRODUCTION TO GRANT WRITING - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course offers an in-depth and practical approach to grant writing for the nonprofit sector. Topics include project and budget planning, how to research and find the right foundation for a "match" with your proposed project, and how to write a compelling and competitive grant from start to finish.

## BUAD 44 INVESTMENTS (formerly FIN 44) - 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Course designed to help the student gain an understanding of stocks, bonds, and other securities. Students will be encouraged to develop their own investment philosophy based on an understanding of the securities market and methods of analyzing that market. Recommended for students wanting an understanding of how businesses raise capital in the securities market. The student will develop a hypothetical personal investment portfolio, which will be tracked with the assistance of a web-based monitoring system. This course may be offered in a distance education format.

## BUAD 45 HUMAN RELATIONS ON THE JOB - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Human Relations on the Job is a course designed to give the student the opportunity to increase interpersonal skills. There is particular emphasis on communication, motivation, leadership, and group decision skills. Emphasis is placed on improved relationships among employees and between employees and employers. Topics include communication processes and styles, attitudes, values, motivation, leadership, valuing diversity, and reinforcement on the job. This course may be offered in a distance education format.

## BUAD 46 FUNDAMENTALS OF NONPROFIT MANAGEMENT - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
Fundamentals of Nonprofit Management provides an understanding of the nonprofit sector as a whole and as well as nonprofit management from an overview perspective. This course will introduce the fundamentals of effective organization mission and vision statements, strategic planning, operations management, and budgeting. Participants will gain understanding of different aspects of management of a nonprofit organization. This course may be offered in a distance education format.

## BUAD 47 FUNDRAISING TECHNIQUES AND PLANNING - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
Fundraising Techniques and Planning will provide participants with the information and resources needed to help understand and prepare fund raising goals with confidence. Presentation will include an overview of fund raising vehicles, tools and methods for developing a funding plan, and how to best market to build awareness within the community for the organization's mission. This course may be offered in a distance education format.

BUAD 48 GRANT FUNDING: FINDING THE RIGHT SOURCE - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
Grant Funding: Finding the Right Source provides an overview to the grant-seeking process that includes defining needs, identifying and researching prospective grant makers, writing proposals, cultivating grant makers, and accountability - reporting and following up with grant makers. This course may be offered in a distance education format.

## BUAD 49 NONPROFIT FINANCIAL MANAGEMENT - . 5 Unit

Grading: Pass/No Pass Option
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
Nonprofit Financial Management will provide an overview on the basic processes involved in nonprofit financial management. The course will focus on financial management issues faced by board members and by senior and executive managers in nonprofit organizations. The student will learn professional financial management practices for a nonprofit organization. Discussion will include how to develop and implement appropriate controls, procedures and financial management policies to ensure your organizations financial well-being. This course may be offered in a distance education format.

BUAD 50 MARKETING AND PUBLIC RELATIONS FOR NONPROFITS 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
Offering a combination of theory and practice, Marketing and Public Relations for Nonprofits demonstrates how to market to key audiences, both inside and outside of the organization. In addition to helping participants understand target markets and shaping the message for the audience, this course discusses key public relations vehicles. This course may be offered in a distance education format.

## BUAD 51 BOARDS OF DIRECTORS IN NONPROFIT ORGANIZATIONS . 5 Unit

Grading: Pass/No Pass Option
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
In addition to being legally mandated, boards of directors play a crucial role in shaping and leading nonprofit organizations. This course focuses on how boards are developed, their legal governance roles and how partnerships between board members and the executive staff can assist the organization in fulfillment of its mission. This course may be offered in a distance education format.

## BUAD 52 STAFF AND VOLUNTEER MANAGEMENT IN NONPROFIT ORGANIZATIONS - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
Effective staff and volunteer management is critical to the success of nonprofit organizations. This course examines the management of nonprofit employees and volunteers, including recruitment, hiring, development, performance evaluation and various legal aspects of human resource activities. Discussions will include the importance of increasing the diversity of the staff and board to reflect the diverse community-at-large. This course may be offered in a distance education format.

## BUAD 53 ACCOUNTABILITY REQUIREMENTS FOR NONPROFIT ORGANIZATIONS - . 5 Unit

Grading: Pass/No Pass Option
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
Nonprofit managers need to know about the laws that create and govern nonprofit organizations. This course examines the laws and general regulations that apply to nonprofit organizations, including documentation, record keeping, and tax exemption requirements. This course may be offered in a distance education format.

## BUAD 54 NONPROFIT POLICY, ADVOCACY AND COMMUNITY BUILDING -

 . 5 UnitGrading: Pass/No Pass Option
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
Nonprofit leaders must understand the political and public policy areas shaping program mandates and funding opportunities. Facing new challenges, nonprofits must prepare to influence public policy and respond to threats to their environment. This course covers advocacy, building and expending political capital, and developing community relationships. This course may be offered in a distance education format.

## BUAD 66 BUSINESS COMMUNICATIONS - 3 Units

Prerequisite: A grade of C or higher in BUAD 166 or English Placement Level 6 or higher
Note: Student must submit all assignments in keyboarded (not handwritten) format. Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides implementation of letter-writing principles and techniques through expository and argumentative writing. Additionally, the writing of an employment portfolio, business letters, and team presentation is required. Application of electronic communication (Netiquette, email format, Internet uses) will also be presented. This is a required course for many major and certificate programs and an alternate requirement or suggested elective in others. This class also satisfies the A.S. General Education requirement in English. This course may be offered in a distance education format.

## BUAD 71 INTRODUCTION TO e-COMMERCE - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
This course is an introduction to e-commerce principles. Topics include an overview of where e-commerce fits into the business, e-commerce basics, cost-benefit of ecommerce solutions, planning and development. This course offers practical suggestions to individuals involved in or planning an e-commerce business or business component. This course may be offered in a distance education format.

BUAD 72 e-COMMERCE MARKETING - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
E -Commerce Marketing (electronic commerce) is the study of all the online or electronic-based activities that facilitate manufacturing goods and services by the producer to satisfy the wants and needs of the consumer. Electronic marketing draws heavily on networks' technology to coordinate market research, aid product development, and develop strategies and tactics to persuade consumers to buy, provide for online distribution, maintain customer records, conduct customer satisfaction surveys, and gather consumer feedback. Electronic marketing advances the overall marketing program that in turn supports the company's overall marketing business objectives. This course may be offered in a distance education format.

## BUAD 73 WEB DESIGN CONCEPTS FOR e-COMMERCE - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
This course is a conceptual approach to basic principles/concepts of web design for e-commerce applications. Topics include analysis of established e-commerce web sites; internet principles and access; storefront services; software options; advertising options; search engines and directories; monitoring customers; understanding forms; databases; shopping carts; and payment processing. This is a CONCEPTUAL course and does not involve the hands-on development of web sites. This course may be offered in a distance education format.

BUAD 76 SALES (formerly MKTG 70, BUSI 70) - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Study of the fundamental problems, practices, and techniques of the salesperson. The course covers both retail and direct selling techniques including prospecting, pre-approach, demonstration/presentation, handling objections, closing, follow-up, and time management. Students will be required to make a minimum of one sales presentation in class.

## BUAD 77 PRINCIPLES OF MARKETING - 3 Units <br> (formerly MKTG 74, BUSI 74)

Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hour will total 162)
This course is designed to help the student understand everyday marketing problems in organizations. Topics include changing role of marketing, the marketing mix, consumer behavior, sales, advertising, market research, middlemen, retailing, product development, and marketing plans. Additionally, the writing and presentation of a marketing plan is required. This course may be offered in a distance education format.

## BUAD 80 PRINCIPLES OF CUSTOMER SERVICE - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is designed to provide the student with understanding and knowledge of the importance of meeting the needs of customers in a service economy. Students will gain insight into employer and customer expectations of service levels. Emphasis will be placed on developing specific skills and abilities critical to providing excellent customer service. In addition, the student will be introduced to the concepts of internal and external customers, customer satisfaction and customer retention. Other topics covered are attitude in the workplace, communicating with customers, decision making and problem solving, conflict resolution, and dealing with change in the workplace. This course may be offered in a distance education format.

BUAD 81 STRESS MANAGEMENT IN THE WORKPLACE - . 5 Unit
Grading: Pass/No Pass Only
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
This course is designed to acquaint the student with various skills the supervisor needs to help employees. Included in the recognition of stress and how to manage it, job burnout and what to do about it, and counseling employees in various situations. This course may be offered in a distance education format.

## BUAD 82 MANAGING ORGANIZATIONAL CHANGE - . 5 Unit

Grading: Pass/No Pass Only
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
This course is designed to provide the student with an understanding of change and the influence it has on an organization and the individuals in that organization. Topics will include understanding organizational change, theoretical models of change, stages of change, and how to manage organization change. This course may be offered in a distance education format.

BUAD 83 CONFLICT RESOLUTION - . 5 Unit
Grading: Pass/No Pass Only
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
This course is designed to provide the student with an analysis of attitudes and behavior, which create conflict between individuals and groups within an organization. This course may be offered in a distance education format.

## BUAD 84 ATTITUDE IN THE WORKPLACE - . 5 Unit

Grading: Pass/No Pass Only
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
This course is designed to provide the student with certain key skills in the area of attitude so that they may effectively maintain a positive attitude at the workplace and at home. The student will be introduced to the concepts of how attitudes are communicated, the three types of attitudes and how to adjust one's attitude. Topics will also include the primary causes of a bad attitude, turnaround strategies to battle these bad attitudes and specific techniques to raise the attitude of others. This course may be offered in a distance education format.

## BUAD 85 CUSTOMER SERVICE IN THE WORKPLACE - . 5 Unit

Grading: Pass/No Pass Only
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
This course is designed to provide the student with certain key skills and attitudes in order to effectively meet the needs of the customers. The student will be introduced to the concept of internal and external customers, customer satisfaction and customer retention. Topics will also include communicating with customers, developing a positive attitude, handling complaints and sales skills. This course may be offered in a distance education format.

BUAD 86 DECISION MAKING AND PROBLEM SOLVING - . 5 Unit
Grading: Pass/No Pass Only
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
This course is designed to introduce the student to decision making and problem solving as a supervisor. This course may be offered in a distance education format.

## BUAD 87 TEAM BUILDING - . 5 Unit

Grading: Pass/No Pass Only
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
This course is designed to provide the student with an understanding of how teams work together, common problems teams encounter and how to solve them. Students will learn to recognize various team player styles. Students will be introduced to team building in the workplace. This course may be offered in a distance education format.

## BUAD 88 COMMUNICATING WITH PEOPLE - 5 Unit

Grading: Pass/No Pass Only
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
This course is designed to introduce the student to key elements in communication within business organizations. Topics will include verbal and nonverbal communication, listening skills and specific supervisory communication skills. This course may be offered in a distance education format.

## BUAD 89 TIME MANAGEMENT - 5 Unit

Grading: Pass/No Pass Only
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
This course is designed to introduce the student to time management principles and specific tools that assist in making maximum use of time. Basic concepts of managing space will also be covered. This course may be offered in a distance education format.

BUAD 90 VALUES AND ETHICS- . 5 Unit
Grading: Pass/No Pass Only
Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)
This course is designed to acquaint the student with the importance of values and ethics in the workplace. The importance of values and ethics involved in the supervisor carrying out his/her duties will be emphasized. This course may be offered in a distance education format.

## BUAD 91 PRINCIPLES OF MANAGEMENT - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This is a basic course to broaden the student's knowledge of the business organization emphasizing how the organizational structure can affect personnel, productivity, and ultimately the success of the firm. This course is required for the Business Management Certificate Program and is designed to assist any student who may already be on the lower rungs of the management ladder wishing to
become more knowledgeable about organization and management theory. The course should stimulate thought and discussion of several aspects of management and provide a limited opportunity for public speaking. This course may be offered in a distance education format.

## BUAD 94 BUSINESS WORKSITE LEARNING - 1-8 Units

Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

BUAD 97 SPECIAL TOPICS IN BUSINESS ADMINISTRATION - .5-2 Units Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in business administration. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## BUAD 98 SPECIAL LAB TOPICS IN BUSINESS ADMINISTRATION -.5-2 Units

 Grading: Pass/No Pass Option
## Class Hours: 27-108 lab total

This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in business administration. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## BUAD 106 BUSINESS MATHEMATICS - 3 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in MATH 240 or Math Placement Level 2 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A required course in several business occupational majors and suggested elective in others. Student entering this class should have a strong foundation of basic arithmetic skills of adding, subtracting, multiplying, and dividing of whole numbers, fractions, decimals, and percentage values. The class consists of applications of these skills to such business problems as markup, simple, discount, and compound interests, trade and cash discounts, insurance, installment buying, and depreciation. Waiver: Under certain circumstances, this course may be waived for some A.A. degrees or certificate requirements by substituting MATH 102 or higher math course. This course may be offered in a distance education format.

BUAD 120 STARTING A SMALL BUSINESS - THE ENTREPRENEUR -1 Unit Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
A survey course that explores various components that need to be considered for anyone contemplating or currently operating a small business - the Entrepreneur. The major class project will be the development of a basic executive summary of the student's business of choice. This course may be offered in a distance education format.

## BUAD 166 BUSINESS ENGLISH - 3 Units

Prerequisite: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides an effective command of written English for transaction of business. Emphasis is given to grammar, spelling, vocabulary, and punctuation, and the format of the business letter, including expository and argumentative writing as well as the necessary information competency skills to select and incorporate reliable data in support of an argument. This is a required course for many majors and certificate programs and an alternative requirement or suggested elective in others. This course may be offered in a distance education format.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.

BUAD 176 RETAIL MANAGEMENT - 3 Units (formerly MKTG 176, BUSI 176) Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A course designed to develop student proficiency in the diverse aspects of retailing. The course includes specific areas of study, such as: store site location, store layout, product line selection, buying, pricing, selling, advertising, and financial management. This class is designed for those going into retail as well as those students planning to enter businesses that deal with retail merchants, i.e., wholesalers, advertising media, insurance agencies, accounting firms, and other service areas. This course may be offered in a distance education format.

## CHEMISTRY (CHEM)

CHEM 1A GENERAL CHEMISTRY - 5 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in CHEM 16 or CHEM 2A, or a score of 20 or higher on the California Chemistry Diagnostic test; and a grade of C or higher in MATH 102 or Math Placement Level 4 or higher. (If you have completed one year of high school chemistry with a grade of C or higher, you will be eligible to enroll in this course once you have seen a counselor.)
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Class Hours: 54 lecture/54 lab/18 discussion
A course for science and engineering majors which covers the nature of atoms, molecules, and ions; chemical reactions; precipitation, oxidation-reduction, and acid/base chemistry. stoichiometry; electronic structure; periodicity; chemical bonding; properties of solids, liquids, gases, and solutions; and an introduction to thermodynamics and equilibrium.

CHEM 1B GENERAL CHEMISTRY - 5 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in CHEM 1A
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Class Hours: 54 lecture/18 discussion/54 lab total
An introduction to chemical kinetics, nuclear chemistry, transition metals, and organic chemistry; along with continued, in-depth study of equilibrium, thermodynamics, electrochemistry, acid-base and solution chemistry.

CHEM 2A INTRODUCTION TO CHEMISTRY - 5 Units
Prerequisite: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Class Hours: 54 lecture/18 discussion/54 lab total (when offered in the Distance Education format, lecture hours will total 216)
This course is a survey of inorganic chemistry and some organic chemistry suitable for agriculture and nursing students. The basic fundamentals of the metric system, chemical nomenclature, atomic and molecular structure, chemical reactions, energy changes, states of matter, solutions, chemical equilibria and kinetics, and organic functional groups are presented. The quantitative nature of chemistry is developed by introduction of the Avogadro's number and the mole and continuing with stoichiometry, gas law, solution concentrations and pH calculations. The lecture/discussion portion of this course may be offered in a distance learning format.

CHEM 2B INTRODUCTION TO ORGANIC AND BIOCHEMISTRY - 5 Units Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in CHEM 2A or CHEM 1A
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 54 lecture/54 lab/18 discussion total (when offered in the Distance Education format, hours will total 216 for the lecture/discussion portion of this class and an additional 54 hours of lab totaling 270 hours for this course)
A survey of the major classes of organic compounds including structure, nomenclature, properties, reactions, and the reaction mechanisms; an introduction to the biochemistry of proteins, carbohydrates, lipids, nucleic acids and their basic metabolic reactions. Suitable for nursing, dental hygiene, agriculture/natural resources and non-science majors. The lecture/discussion portion of this course may be offered in a distance education format.

## CHEM 6 INTRODUCTORY CHEMISTRY APPLIED TO THE ENVIRONMENT 4 Units <br> Prerequisite: A grade of C or higher in MATH 101, or Math Placement Level 3 or higher <br> Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Class Hours: 36 lecture/108 lab total <br> An introduction to the basic principles of general chemistry. Emphasis will be placed on applications to the chemistry of the environment, soils, water, air, agriculture, natural resources, and related consumer products. This course is suitable for

 environmental technology, agriculture, natural resources, and liberal arts students.CHEM 10 CHEMISTRY FOR THE LIBERAL ARTS - 3 Units
Grading: Pass/No Pass Option
Note: CHEM 10 will meet the general education requirement for a laboratory science if taken with CHEM 11
Class Hours: 54 lecture (when offered in the Distance Education format, hours will total 162)
A non-mathematical introduction to the major concepts of chemistry with attention to their relevance to practical and societal problems. This course is intended for nonscience majors who wish to gain an appreciation for the application of chemistry to everyday living. The course includes such topics as nuclear energy and energy alternatives; health issues of drugs; food additives, nutrition, hormones; chemicals for household use, chemicals in the environment, and synthetics. This course may include field trips. This course may be offered in a distance education format. This course will meet the general education requirement for a laboratory science if the laboratory course is taken with CHEM 11.

CHEM 11 CHEMISTRY LABORATORY FOR THE LIBERAL ARTS - 1 Unit Grading: Pass/No Pass Option
Corequisite: Students must be concurrently enrolled in, or have completed CHEM 10 with a grade of C or higher
Note: CHEM 10 taken with CHEM 11 meets GE requirement in science. Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 54 lab total (when offered in the Distance Education format, hours will total 54)
Laboratory experiments and demonstrations, almost entirely non-mathematical, covering the basic concepts of the lecture course, CHEM 10. The laboratory is designed to help students learn how to use various chemicals around us, safely and effectively. This course may include field trips. This course may be offered in a distance education format.

## CHEM 16 CHEMICAL PROBLEM-SOLVING - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introductory chemistry course for students who plan to major in a scientific field. This course is also designed to prepare students for General Chemistry 1A. The major emphasis of the course will be on chemical problem-solving. This course may be offered in a distance education format.

## CHEM 26 FUNDAMENTALS OF GENERAL, ORGANIC, AND BIOCHEMISTRY

 - 4 UnitsClass Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
An introduction to the fundamental principles of general, organic, and biochemistry delivered completely online that will emphasize practical applications to nursing and health professions. This course will fulfill the CSU-Chico requirement for entry to the RN to BSN upgrade program. It is also suitable for AA degree programs and nonscience transfer students. It may fulfill requirements for other related health and nutritional degree programs. This course may be offered in a distance education format.

CHEM 70 ORGANIC CHEMISTRY - 4 Units
Prerequisite: A grade of C or higher in CHEM 1B
Note: CHEM 70A should be taken concurrently with CHEM 70 for science majors for transfer
Class Hours: 54 lecture/18 discussion total (when offered in the Distance Education format, hours will total 216)
Structure, bonding, Polar bonds and their consequences, Alkanes and Cycloalkanes, stereochemistry and physical properties of organic compounds. Overview of organic reactions, reactions and mechanisms of alkanes, alkenes, alkynes, organic halides, Nucleophilic substitutions and eliminations. Science majors should take a second semester organic course, CHEM 71, which completes the required two-semester sequence. CHEM 70A, laboratory course, should be taken concurrently for science majors. Check school of transfer for their requirements. This course may be offered in a distance education format.

## CHEM 70A ORGANIC CHEMISTRY LABORATORY - 1 Unit

Prerequisite: A grade of $C$ or higher in CHEM 1B
Corequisite: Students must be concurrently enrolled in, or have completed CHEM 70 with a grade of $C$ or higher
Note: Chemistry majors are required to take CHEM 70A concurrently with CHEM 70. Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Class Hours: 54 lab total
Theory and application of organic chemistry laboratory techniques.

CHEM 71 ORGANIC CHEMISTRY - 3 Units
Prerequisite: A grade of C or higher in CHEM 70
Note: CHEM 71A should be taken concurrently with CHEM 71 for science majors for transfer
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A continuation of CHEM 70. Infrared Spectroscopy, Mass Spectrometry, Nuclear Magnetic Resonance, Conjugated Dienes and Ultraviolet Spectroscopy, Benzene and Aromaticity, Chemistry of Benzene, Electrophilic Aromatic Substitution Alcohols and Phenols, Ethers and Epoxides, Thiols and Sulfides, Aldehydes and Ketones, Carboxylic Acids, Carboxylic Acids, Carboxylic Acid Derivatives and Nucleophilic Acyl substitution, Carbonyl alpha-substitution Reactions Carbonyl Condensation, Amines, Carbohydrates, Amino Acids, Peptides and Proteins, Lipids. This course completes a two-semester sequence for science majors. CHEM 71A, laboratory course, should be taken concurrently for science majors. Check school of transfer for their requirements. This course may be offered in a distance education format.

## CHEM 71A ORGANIC CHEMISTRY LABORATORY - 2 Units

Prerequisite: A grade of C or higher in CHEM 70A
Corequisite: Students must be concurrently enrolled in or have completed CHEM 71 with a grade of C or higher
Note: Chemistry majors are required to take CHEM 71A concurrently with CHEM 71. Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 108 lab total
A continuation of Organic CHEM 70A. Theory and application of organic chemistry laboratory techniques.

CHEM 97 SPECIAL TOPICS IN CHEMISTRY - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in chemistry. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

CHEM 98 SPECIAL TOPICS IN CHEMISTRY - LAB SKILLS - .5-2 Units Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics in a lab setting dealing with changing knowledge in chemistry. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## CHINESE (CHIN)

CHIN 1 ELEMENTARY MANDARIN CHINESE - 5 Units
Grading: Pass/No Pass Option
Class Hours: 90 lecture total
This introductory course is designed to give the student thorough and intensive practice in speaking and listening to Chinese and reading and writing Chinese characters. The course will focus on communicative competence in situations relating to daily routines, home life, college life, and everyday activities such as meeting and describing people. Students are introduced to the culture of Chinese speakers in China and in other countries.

## COMMUNICATION STUDIES (CMST)

## CMST 10 INTERPERSONAL COMMUNICATION - 3 Units <br> (formerly SPCH 10/10A)

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
This course is an introduction to the process of human communication with emphasis on the rhetorical principles of social interaction. The examination of the psychological, social, cultural and linguistic factors that affect normal person-toperson interactions includes: the structure of the communication message and process; developing effective messages; clear organization of the message; critical thinking skills in problem solving; analyzing, adapting to and responding to the audience; and delivery of the message both verbally and nonverbally. This course includes individual and group practice which will be evaluated. Each student will demonstrate their understanding and comprehension of Rhetorical Theory by successfully making prepared, evaluated, oral presentations throughout the semester. College level writing skills will be expected on all papers, outlines and short essays. This class satisfies the Oral Communication requirement for the Associate Degree.

CMST 20 INTERCULTURAL COMMUNICATION - 3 Units (formerly SPCH 20) Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The purpose of this course is to develop the skills necessary to build and maintain positive communication and relationships across cultures. Students will focus on similarities and differences in communication behaviors. Perceptions, language usage, nonverbal style, thinking modes, and values all will be explored to see how they influence face-to-face communication between individuals of different cultures. This course may be offered in a distance education format.

CMST 30 ORAL INTERPRETATION - 3 Units (formerly SPCH 30)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or a English Placement Level 6 or higher
Class Hours: 54 lecture total
This course is an introduction to the process of human communication with emphasis on the oral interpretation of literature. Subjects covered are analyzing the literature, using nonverbal and verbal communication in the interpretation of literature and the understanding, appreciation and performance of prose and poetry. College level writing skills will be expected on all papers, outlines and short essays. This course includes oral performance of literature.

CMST 40 ARGUMENTATION AND DEBATE - 3 Units (formerly SPCH 40) Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher; and completion of a class in public speaking or public speaking experience Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is an introduction to the nature of argument and critical thinking, including methods of analysis, research, critical evaluation of reasoning and evidence, refutation, and debate as a practical application of argumentation. Basic principles are applied in a variety of formal and informal debate situations. Public speaking training and/or experience are recommended for enrollment. This course may be offered in a distance education format.

CMST 54 SMALL GROUP COMMUNICATION - 3 Units (formerly SPCH 54) Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Class Hours: 54 lecture total (. 5 to 1.5 units may be offered in the Distance Education format)
This course is an introduction to the process of human communication with an emphasis on small groups. Subjects covered are preparation for discussion, group participation, leadership, decision-making, interpersonal relations, managing diversity, critical thinking/problem-solving, managing conflict, and evaluation of group interaction. Students will be involved in group interactions and emphasis will be on practical experience. College level writing skills will be expected on all papers, outlines and short essays. A portion of this course may be offered in a distance education format.

## CMST 60 PUBLIC SPEAKING - 3 Units (formerly SPCH 60/60A)

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
This course is an introduction to the process of human communication with emphasis on public speaking. The subjects covered are: speech topic selection, audience analysis, information competency (e.g. researching, evaluating and using supporting materials), presentation outlining, principles of effective speech delivery, critical evaluation of speeches, and presentation of informative and persuasive speeches. Most students will have the opportunity to be recorded and to use presentational technology. College level writing skills will be expected on all papers, outlines and short essays.

## CMST 75 FORENSICS WORKSHOP - 3 Units

Grading: Pass/No Pass Option
Note: Field trips are required
Class Hours: 18 lecture/108 lab total
Principles of applied speech communication through participation in competitive intramural and intercollegiate speech performances and/or performance festivals, including debate, public speaking and interpretive performances. In addition to forensic competition, the student will debate, speak and perform before a variety of audiences, including community groups (including non-speech classes at all academic levels), audiences assembled for major Readers Theater productions, critic-judges in competitive settings, and classroom workshops.

CMST 97 SPECIAL TOPICS IN COMMUNICATION STUDIES - .5-2 Units (formerly SPCH 97/91AD)
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is an introduction to the process of human communication with an emphasis on public speaking. Subjects covered are analyzing audiences, choosing speech topics, finding and using supporting materials, arranging and outlining related points, demonstrating essentials of speech delivery, and evaluating speeches. Most students will have the opportunity to be videotaped and to use presentational technology. College level writing skills will be expected on all papers, outlines, and short essays.

## COMMUNICATIONS (COM)

COM 20 INTRODUCTION TO MULTI-MEDIA - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This class studies how multimedia programs are designed and produced. Professional and amateur productions are extensively analyzed for form, content and overall design effectiveness. The class traces the process of a typical multimedia project from start to finish. This includes design implementation, user analysis, interface and interaction considerations, project management and client needs assessment. The class explores the technical aspects of production, including capturing and compressing sound and visual images. Delivery systems such as the Internet and CD ROM are evaluated. An overview of "tools of the trade" examines a variety of production and editing software. The class is not platform specific nor does it attempt to teach all the software discussed.

## COM 21 MULTI-MEDIA AUTHORING - 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course will acquaint the student with the process of designing and producing effective multi-media presentations. Students work individually and as part of a creative team. The focus is on identifying and analyzing audiences; designing, adapting and organizing information for maximum effect, and then producing text, audio and video presentations, such as podcasts, video shorts suitable for freestanding use or for interactive and social-networking websites. Software such as Final Cut, Audacity, WordPress, Joomla and Dokuwiki are complex tools that will be explored. The class also will explore basic planning strategies, audience analysis, production techniques, materials and equipment involved in a computer multimedia production. Students will be expected to produce at least two projects suitable for a portfolio and that could be used for a blog, podcast, video-sharing or socialnetworking site, and a live or point-of-sale presentation. This course may be offered in a Distance Education format.

## COM 22 BEGINNING TV PRODUCTION - 3 Units

Class Hours: 27 lecture/81 lab total
A basic course in the theory and operation of television broadcast equipment. Students will complete projects and activities so that they can effectively operate broadcast equipment and understand its engineering and production capabilities. This is a beginning course in television production.

## COM 30 INTRODUCTION TO AUDIO RECORDING - 3 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This is an introduction to the fundamentals of audio recording. Concepts covered will be the fundamentals of electricity, musical acoustics and audio theory. Course enrollment is open to communication and non-communication majors. Topics include: basics of electricity, acoustics, psychoacoustics, audio measurement terms and concepts, microphones, mixers, signal processing and hard disk recording. This course may be offered in a distance education format.

## COM 31 INTRODUCTION TO DIGITAL AUDIO - 3 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This is an introduction to the fundamentals of digital audio theory, editing, MIDI sequencing and the production of digital audio for the web and video and a variety of other media. Topics to be covered are digital audio theory, two track digital editing, multi-channel recording, digital sequencing, and time-code. Course enrollment is open to communication and non-communication majors. This course may be offered in a distance education format.

COM 97 SPECIAL TOPICS IN COMMUNICATION DESIGN - .5-3 Units Grading: Pass/No Pass Option
Class Hours: 27-162 lab
This course is designed to give students experiential instruction in a variety of communication settings. It focuses on the design, implementation, management, and coordination of the technical elements of production of communication design projects. Students will design multimedia projects, manipulate digital and analog sounds and images, and develop and produce television, radio, or internet content.

A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. This course may be repeated three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## COMPUTER INFORMATION SYSTEMS (CIS)

CIS 1 COMPUTER LITERACY WORKSHOP - 3 Units (formerly MIS 19) Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the Microsoft Operating System and Office Suite--further information will be provided on the first day handout.
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
This course is intended to help students achieve a degree of computer literacy through exposure to a variety of basic computer concepts including discussions of hardware, software, computer history, programming, computer ethics, and cultural implications. In addition, the student will be introduced to several hands-on applications such as systems software (Windows), word processing software (MS Word), spreadsheet software (MS Excel), database software (MS Access), and presentation software (MS PowerPoint). This course may be offered in a distance education format.

CIS 2 INTRODUCTION TO COMPUTER SCIENCE - 4 Units (form. MIS 20) Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
This course is designed as an introduction to computer technology for those students planning on a career in the field of computer science or related disciplines. Computer history, hardware, software, processing, systems, programming languages, storage devices, careers, and impact on society will be explored to enable the student to become literate in the technical aspects of computing. Common business applications are used to examine a wide range of methods for processing data in the interactive mode. The students will design, code, and debug programs in languages such as Machine, Assembler, Java, C and/or BASIC as assigned. This course may be offered in a distance education format.

CIS 3 SYSTEMS ANALYSIS METHODS - 3 Units (formerly MIS 29) Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Information Systems Analysis with emphasis on current system documentation through the use of both classical and structured tools/techniques for describing process flows, data structures, file designs, input and output designs and programs specifications. Discussion of the information gathering and reporting activities and of the transition from analysis to design. This course specifically satisfies requirements for the CIS-4 course in the DPMA Education Foundation Model Curriculum for Undergraduate Computer Information Systems Education. This course may be offered in a distance education format.

CIS 4 BUSINESS DATA COMMUNICATIONS - 3 Units (formerly MIS 30) Advisory: A grade of C or higher in CIS 1 or CIS 2 or equivalent computer experience recommended for success.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Covers the concepts, vocabulary, design issues, and techniques currently used in the area of data communications. Topics include history and evolution of the Internet, transmission media, interconnection topology, control methods, protocols, types of nodes, network interfaces, bridges, gateways, performance considerations, maintenance considerations, and security considerations. This course may be offered in a distance education format.

## CIS 6 COMPUTER BASICS - . 5 Unit

Grading: Pass/No Pass Option
Class Hours: 9 lecture total
A brief introductory course in computer basics covering hardware, software, file management, email set-up and use, and Internet accessibility.

## CIS 20 ACCESS FOR WINDOWS - I - 1 Unit (formerly MIS 53)

Grading: Pass/No Pass Only
Advisory: Ability to type 25 wpm
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center and the Tehama campus. Students taking the Internet format of this course must have access to the same version of Microsoft Operating System and Office Suite being used in the course.
Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
This course introduces the concepts, principles, and creation of relational databases through multi-media lecture/demonstration/discussion using Microsoft ACCESS on an IBM compatible microcomputer. Topics to be covered will include: the principles and elements of the relational database; design of tables and data entry; maintenance of the database for data accuracy; queries for sorting, linking related
tables, and selecting specific records; development of forms for viewing as well as entering data; and reports for presenting printed copy of the database and/or selected records. This course provides preparation for the Microsoft Certified Application Specialist Access exam (77-605). This course may be taught in a distance education format.

## CIS 21 ACCESS FOR WINDOWS-II - 1 Unit (formerly MIS 54)

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in CIS 20 or a grade of C or higher in CIS 23 Advisory: Ability to type 25 wpm
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center and the Tehama campus. Students taking the Internet format of this course must have access to the same version of Microsoft Operating System and Office Suite being used in the course.
Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
Designed to expand and improve database management skills through multi-media lecture/demonstration/discussion on an IBM compatible microcomputer. Instruction will include a review of database design concepts; queries involving linked tables, logical operators, calculated fields; crosstab, update, and summary queries; pivot tables and Pivot Charts; presentation of data through forms and reports (including field calculations and graphics); creating hyperlinks from Access to web pages; importing and exporting data; and advanced queries. This course provides preparation for the Microsoft Certified Application Specialist Access exam (77-605). This course may be offered in a distance education format.

## CIS 22 ACCESS FOR WINDOWS - III - 1 Unit (formerly MIS 55)

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in CIS 21
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center and the Tehama campus. Students taking the Internet format of this course must have access to the same version of Microsoft Operating System and Office Suite being used in the course.
Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
Designed to expand and improve database management skills to a more advanced level of proficiency through multi-media lecture/demonstration/ discussion on an IBM compatible microcomputer. Instruction will include a review of database design concepts; management, maintenance, and protection of the database and its objects; development and use of macros and modules; customizing forms and reports; providing user-friendly access; and analyzing database performance. This course provides preparation for the Microsoft Certified Application Specialist Access exam (77-605). This course may be offered in a distance education format.

## CIS 23 INTRODUCTION TO DATABASE MANAGEMENT - 3 Units

Advisory: A grade of C or higher in CIS 1
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
This course is designed to provide individuals with a complete introduction to database concepts and the relational database model. Topics include QBE, SQL, normalization, design methodology, DBMS functions, database administration, and other database management approaches, such as client/server databases, object oriented databases, and data warehouses. At the completion of this course, students should be able to understand a user's database requirements and translate those requirements into a valid database design. Microsoft Access is used to illustrate database design concepts. The concepts and skills taught in this course include but go well beyond the level of the Access for Windows I course. This course may be offered in a distance education format.

## CIS 31 CISCO CCNA 1 - NETWORKING FOR HOME AND SMALL BUSINESSES - 3 Units (formerly MIS 32, MIS 1) <br> Advisory: A grade of C or higher in CIS 2

Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
This course is the first in a two-course series designed to prepare students for the Cisco Certified Entry Network Technician (CCENT) exam, and the course is the first of a four-course series designed to prepare students for the Cisco Certified Networking Associate (CCNA) exam. This course is offered by Shasta College as the Cisco Regional Networking Academy in the area. Instructional materials developed by Cisco Systems are utilized for the course. The course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Labs include PC installation, Internet connectivity, wireless connectivity, file and print sharing, and the installation of game consoles, scanners, and cameras. This course may be offered in a distance education format.

CIS 32 CISCO CCNA 2 - WORKING AT A SMALL-TO-MEDIUM BUSINESS OR ISP - 3 Units (formerly MIS 32, MIS 2)
Prerequisite: A grade of C or higher in CIS 31
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
This course is the second in a two-course series designed to prepare students for the Cisco Certified Entry Network Technician (CCENT) exam, and the course is the second of a four-course series designed to prepare students for the Cisco Certified Networking Associate (CCNA) exam. This course is offered by Shasta College as the Cisco Regional Networking Academy in the area. Instructional materials developed by Cisco Systems are utilized for the course. The course prepares students for jobs as network technicians. It also helps students develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It familiarizes students with servers that provide email services, Web space, and authenticated access. Students learn soft skills required for help desk and customer service positions. Network monitoring and basic troubleshooting skills are taught in context. This course may be offered in a distance education format.

## CIS 33 CISCO CCNA 3 - ROUTING AND SWITCHING IN THE ENTERPRISE

 - 3 Units (formerly MIS 33, MIS 3)Prerequisite: A grade of C or higher in CIS 32
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
This course is the third in a four-course series designed to prepare students for Cisco Certified Networking Associate (CCNA) exam. The course is offered by Shasta College as the Cisco Regional Networking Academy in the area. Instructional materials developed by Cisco Systems are utilized for the course. The course familiarizes students with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols including Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. Other specific topics include Virtual LANs, Access Control Lists, and inter-VLAN routing. Hands-on exercises include configuration, installation, and troubleshooting. This course may be offered in a distance education format.

CIS 34 CISCO CCNA 4 - DESIGNING AND SUPPORTING COMPUTER NETWORKS - 3 Units (formerly MIS 34, MIS 4)
Prerequisite: A grade of C or higher in CIS 33
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
This course is the fourth in a four-course series designed to prepare students for Cisco Certified Networking Associate (CCNA) exam. The course is offered by Shasta College as the Cisco Regional Networking Academy in the area. Instructional materials developed by Cisco Systems are utilized for the course. Learners progress through a variety of case studies and role-playing exercises, which include gathering requirements, designing basic networks, establishing proof-of-concept, and performing project management tasks. Lifecycle services; including upgrades, competitive analysis, and system integration, are presented in the context of pre-sales support. This course may be offered in a distance education format.

## CIS 35 CISCO CCNP 1 - BUILDING SCALABLE INTERNETWORKS -

 3 Units (formerly MIS 5)Prerequisite: A grade of C or higher in CIS 34 or CCNA Certification
Note: CIS 35, CIS 36, CIS 37 and CIS 38 may be taken in any order
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
CIS 35 is one of a four-course series designed to prepare students for the Cisco Certified Networking Professional (CCNP) exams. This course is offered by Shasta College as the Cisco Regional and Local Networking Academy in the area. Instructional materials developed by Cisco System are utilized for the course. The course introduces students to scalable IP networks. Students will learn how to create an efficient and expandable enterprise network by installing, configuring, monitoring, and troubleshooting network infrastructure equipment (especially routers). Topics include how to configure EIGRP, OSPF, IS-IS, and BGP routing protocols and how to manipulate and optimize routing updates between these routing protocols. Other topics include multicast routing, IPv6, and DHCP configuration. This course may be offered in a distance education format.

CIS 36 CISCO CCNP 2 - IMPLEMENTING SECURE CONVERGED WIDEAREA NETWORKS - 3 Units (formerly MIS 6)
Prerequisite: A grade of C or higher in CIS 34 or CCNA Certification
Note: CIS 35, CIS 36, CIS 37, and CIS 38 may be taken in any order
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
CIS 36 is one of a four course series designed to prepare students for the Cisco Certified Networking Professional (CCNP) exams. This course is offered by Shasta College as the Cisco Regional and Local Networking Academy in the area. Instructional materials developed by Cisco System are utilized for the course. The course introduces students to providing secure enterprise-class network service for teleworkers and branch sites. Students will learn how to secure and expand the reach of an enterprise network with focus on VPN configuration and securing network access. Topics include teleworker configuration and access, frame-mode MPLS, site-to-site IPSEC VPN, Cisco EZVPN, strategies used to mitigate network attacks, Cisco device hardening and IOS firewall features. This course may be offered in a distance education format.

## CIS 37 CISCO CCNP 3 - BUILDING MULTI-LAYER SWITCHED NETWORKS - 3 Units (formerly MIS 7)

Prerequisite: A grade of C or higher in CIS 34 or CCNA Certification
Note: CIS 35, CIS 36, CIS 37, and CIS 38 may be taken in any order
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
CIS 37 is one of a four course series designed to prepare students for the Cisco Certified Networking Professional (CCNP) exams. This course is offered by Shasta College as the Cisco Regional and Local Networking Academy in the area. Instructional materials developed by Cisco Systems are utilized for the course. This hands-on, lab-oriented course stresses the design, implementation, operation, and troubleshooting of multilayer switched networks in a campus LAN environment. Specific topics include VLANs, Spanning Tree Protocol, Inter-VLAN routing, high availability, wireless client access, security, and switch configuration to support voice. This course may be offered in a distance education format.

## CIS 38 CISCO CCNP 4-OPTIMIZING CONVERGED NETWORKS - 3 Units

 (formerly MIS 8)Prerequisite: A grade of C or higher in CIS 34 or CCNA Certification
Note: CIS 35, CIS 36, CIS 37, and CIS 38 may be taken in any order
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
CIS 38 is the last course in a four course series designed to prepare students for the Cisco Certified Networking Professional (CCNP) exams. This course is offered by Shasta College as the Cisco Regional and Local Networking Academy in the area. Instructional materials developed by Cisco Systems are utilized for the course. The course introduces students to optimizing and providing effective QOS techniques in converged networks operating voice, wireless and security applications. Topics include implementing a VOIP network, implementing QoS on converged networks, specific IP QoS mechanisms for implementing the DiffServ QoS model, AutoQoS, wireless security and basic wireless management. This course may be offered in a distance education format.

CIS 39 CISCO NETWORKING - CCNA SECURITY - 3 Units
Advisory: A grade of C or higher in CIS 34 or CCNA Certification
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
This course is offered by Shasta College in its role as a Cisco Local Networking Academy. This course prepares students for the Cisco CCNA Security certification exam. This is a widely recognized entry level certification in the network security field. Obtaining this certification will provide Shasta College students with a competitive advantage in advancing to skilled technician positions in the highdemand job markets of computer and network security. Topics that will be addressed include: vulnerabilities and threats, security policy, security technologies and solutions, firewall and secure router design, switch security, intrusion detection, access lists, VPNs, cryptography, and hands-on equipment configuration. This course may be offered in a distance education format.

## CIS 50 WINDOWS 7 - CONFIGURATION - 1 Unit

Class Hours: 9 lecture/27 lab total
A Microsoft Certified Technical Specialist course. The terminology, planning, installation, configuration, administration, and troubleshooting of the Windows 7 operating system will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-680 and for employment in the IT field. Note: This course may be repeated if student has previously taken CIS 50 with an earlier version of the operating system.

CIS 51 WINDOWS 7 ENTERPRISE SUPPORT TECHNICIAN - 1 Unit Class Hours: 9 lecture/27 lab total
A Microsoft Certified IT Professional course. Supporting and troubleshooting applications on a Windows 7 client for enterprise support technicians. The terminology, planning, installation, configuration, administration, and troubleshooting of applications in the Windows 7 environment will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70685 and for employment in the IT field. Note: This course may be repeated if student has previously taken CIS 51 with an earlier version of the operating system.

CIS 52 SERVER 2008 ACTIVE DIRECTORY CONFIGURING - 1 Unit
Note: Students who have taken CIS 52 Manage and Maintain Windows 2003 Network Infrastructure will be able to register for this course using Windows Vista. Class Hours: 9 lecture/27 lab total
A Microsoft Certified Technology Specialist course. The terminology, planning, installation, configuration, administration, and troubleshooting Windows Server 2008 Active Directory will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-640 and for employment in the IT field.

CIS 53 SERVER 2008 NETWORK INFRASTRUCTURE - 1 Unit
Note: Students who have taken CIS 53 Plan and Maintain Windows 2003 Network Infrastructure will be able to register for this course using Windows Vista. Class Hours: 9 lecture/27 lab total
A Microsoft Certified Technology Specialist course. The terminology, planning, installation, configuration, administration, and troubleshooting Windows Server 2008 Network Infrastructure will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-642 and for employment in the IT field.

CIS 54 SERVER 2008 SERVER ADMINISTRATOR - 1 Unit
Note: Students who have taken CIS 54 Plan, Implement and Maintain Windows 2003 AD Network Infrastructure will be able to register for this course using Windows Vista
Class Hours: 9 lecture/27 lab total
A Microsoft Certified IT Professional course. The terminology, planning, installation, configuration, administration, and troubleshooting Windows Server 2008 administration will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-646 and for employment in the IT field.

CIS 55 EXCHANGE SERVER 2007, CONFIGURING - 1 Unit
Note: Students who have taken CIS 55 Designing a Windows Server 2003 AD and Network Infrastructure will be able to register for this course using Windows Vista. Class Hours: 9 lecture/27 lab total
A Microsoft Certified Technology Specialist course. The terminology, planning, installation, configuration, administration, and troubleshooting Exchange Server 2007 will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-236 and for employment in the IT field.

CIS 57 INTRODUCTION TO COMPUTERS THROUGH GAMING - 3 Units Class Hours: 36 lecture/54 lab total
This course is designed to get students interested in the computer field by teaching concepts as they relate to computer gaming. The course will cover the necessary computer troubleshooting and repair, networking, internet research, and overall computer knowledge needed to use sophisticated networked and online games. This course will include hands-on activities such as labs and projects to further learning and experience.

CIS 60 VISUAL BASIC PROGRAMMING - 3 Units (form. BUSI 27, MIS 27) Advisory: A grade of C or higher in CIS 2
Class Hours: 36 lecture/54 lab total
This course is intended to teach programming techniques using the Visual Basic language. Students will be introduced to Visual Basic statements including, but not limited to input, output, computation, looping, arrays, subroutines, file processing commands, form layout, objects, events, and Visual Basic tools. Students will design, code, test, and execute several detailed business-oriented programs ranging from very simple to complex.

CIS 61 C++ LANGUAGE PROGRAMMING - 3 Units (formerly MIS 25) Advisory: A grade of C or higher in CIS 2
Class Hours: 36 lecture/54 lab total
A study of the C++ Programming language. Emphasis is placed on programming theory and structure including data types, selection and interation structures, functions, arrays, pointers, graphics, objects and classes.

## CIS 62 JAVA PROGRAMMING - 3 Units (formerly MIS 17)

Advisory: A grade of C or higher in CIS 2
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
Java is a platform-neutral, object-oriented, and secure programming language that is quickly becoming the standard programming language for creating interactive content on the World Wide Web (WWW). This course covers Java programming language and the standard Java class libraries. This course may be offered in a distance education format.

## CIS 63 ASSEMBLER LANGUAGE PROGRAMMING - 4 Units (formerly MIS 24) <br> Prerequisite: A grade of C or higher in CIS 2

Class Hours: 54 lecture/54 lab total (when offered in the Distance Education format, hours will total 216)
In this course students will learn the functions and organization of a modern computer microprocessor including control unit, ALU, register files, cache memory, program counter, and instruction register. The internal binary representation of both data and instructions will be studied including ASCII characters, instruction formats, and two's complement number system. Emphasis will be placed on understanding machine language instruction formats and developing computer programs in assembly language. Integer instruction sets will be the primary focus, but floating point instructions will be introduced. A pseudocoding technique will be learned which will facilitate development of code in assembly language. Programming techniques and concepts will be studied including function calls, argument passing, use of the stack, array handling, sorting and searching, reentrant coding, recursive programming, exceptions and interrupts, pipelining, number conversions, and program debugging and documentation. This course is designed to meet transfer requirements in computer science to four-year universities. This course may be offered in a distance education format.

CIS 64 WEB PROGRAMMING USING JAVA/PHP/FLASH - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in CIS 2
Class Hours: 36 lecture/54 lab total
Java is a platform-neutral, object-oriented, and secure programming language that is quickly becoming the standard programming language for creating interactive
content on the World Wide Web (WWW). PHP (Hypertext Preprocessor) is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web-based software applications. Adobe Flash Professional is used to create content for the Adobe Engagement Platform (such as web applications, games and movies, and content for mobile phones and other embedded devices). This course covers Introductory Java Applets, PHP Scripting, and Adobe Flash programming.

## CIS $70 \quad$ WINDOWS I-1 Unit (formerly MIS 45, OAS 74)

Grading: Pass/No Pass Option
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center.
Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
This course is designed to familiarize students with Microsoft Windows. It is a hands-on course designed to give the student a beginning knowledge of Windows' graphical user interface. Topics covered will include manipulating Windows, using Help, launching and running multiple applications, transferring information between applications, and managing files and folders on a disk with Explorer and My Computer. This course may be offered in a distance education format.

## CIS 72 FUNDAMENTALS OF LINUX - 3 Units

Advisory: A grade of C or higher in CIS 2 and CIS 90
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
Fundamentals of Linux is an introductory and hands-on course for new users of the popular Linux operating system. Students will learn basic Linux systems administration skills using both command-line and graphical tools. Topics will include Linux installation and initialization, file system navigation and management, changing file permissions, the vi and emacs text editors, Bash, KDE, and GNOME shell features, process management, shell scripts, security, backup and recovery, printing, and basic networking including clients and network services. The course prepares students for the Comptia Linux+ certification exam. This course may be offered in a distance education format.

CIS 73 PHOTOSHOP - 1 Unit
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in CIS 70 or basic knowledge of word processing and Windows
Class Hours: 9 lecture/27 lab total
This course is designed to introduce students to image editing and graphic rendering and design using Adobe Photoshop. This course should enable students to develop their own graphics and text styles with little or no previous training in graphic arts.

CIS 74 DIGITAL PHOTO EDITING WITH PHOTOSHOP - 1 Unit
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in CIS 70 or basic knowledge of Windows Class Hours: 9 lecture/27 lab total
This course is designed to introduce students to basic digital photo restoration, repairing, and rebuilding techniques using Adobe Photoshop. This course should enable students to restore, repair, and rebuild digital photos with little or no previous training in graphic arts.

## CIS 75 DIGITAL MULTIMEDIA - 1 Unit

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in CIS 70 or basic knowledge of Windows
Class Hours: 9 lecture/27 lab total
This course is designed to introduce students to the basics of using digital multimedia such as digital photos, video, and sound. This course should enable students to extract digital media from devices and prepare the digital media for use on the web, personal computers, and televisions. They will learn how to convert file types for optimal performance in various settings and store the media in different forms for easy retrieval. Digital cameras, video recorders, and digital music have become mainstream technologies as well as digitizing traditional analog media. There has been an increasing demand from consumers and employers for the skills taught in this course.

## CIS 76 CELL PHONE APPLICATIONS DEVELOPMENT - 2 Units

Advisory: A grade of C or higher in CIS 2 and CIS 61
Class Hours: 18 lecture/54 lab total (when offered in a Distance Education format, hours will total 108)
This course covers the development of applications for cell phones such as the iPhone, the Blackberry and more. The course will prepare students to design, program and submit their applications for use on cell phones. This course may be offered in a distance education format.

CIS 79 ADVANCED WEB DESIGN USING DREAMWEAVER AND ADOBE 2 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in CIS 70 or basic knowledge of word processing and Windows
Class Hours: 27 lecture/27 lab total
This course introduces advanced concepts in web design, application development, and web hosting. This course will use dreamweaver and other adobe products such as PhotoShop, Flash, and Fireworks. This course introduces web applications and databases using ASP, PHP, Cold Fusion and AJAX

## CIS 81 WEB DESIGN (EXPRESSION WEB) - 1 Unit (formerly MIS 80)

Grading: Pass/No Pass Option
Advisory: Basic knowledge of word processing, Windows, and the Internet
Note: Students who have taken CIS 81 Web Design (FrontPage 1) will be able to register for this course using Expression Web. Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the Microsoft Operating System and Office Suite's further information will be provided on the first day handout.
Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
This course introduces the student through lecture and hands-on operation to the use of Microsoft Expression Web, a web authoring software. Focus is on the functions of creating, editing, saving, and publishing Web pages. Topics include formatting text, graphical elements, hypertext links, lists, tables, forms, and other active web authoring elements. This course may be offered in a distance education format.

## CIS 83 WEB DESIGN USING DREAMWEAVER - 2 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in CIS 70 or basic knowledge of word processing and Windows
Class Hours: 27 lecture/27 lab tota
This course is designed to introduce students to Web site development using Macromedia Dreamweaver. It will also introduce the students to Flash, Shockwave, CSS and Dynamic Web pages.

## CIS 86 HTML - 3 Units

Grading: Pass/No Pass Option
Note: This class does not require any special software. Assignments may include work outside class, with the use of computer with standard browsers like Internet Explorer, Mozilla Firefox, Chrome, or Safari. Some computer access is provided on campus at the Learning Resource Center.
Class Hours: 54 lecture (when offered in the Distance Education format, hours will total 162)
This is a fundamental course on the Hypertext Markup Language for web page authoring, with lecture and hands-on classes. The topics include: the HTML "TAG" structure, the basic <HTML>, <HEAD> and <BODY> components of a web document, text formatting, creation of hyperlinks, inclusion of images, the use of tables, frame and form structures, and incorporation of multimedia, applets and javascripts. The editing, saving and publishing of web pages is performed with the basic tools provided with any of the currently available Windows platforms; no special software is needed for the class. This course may be offered in a distance education format.

## CIS 90 A+ CERTIFICATION PREPARATION/CISCO IT ESSENTIALS I 4 Units

Advisory: A grade of C or higher in CIS 2
Note: This course replaces ELEC 20, 21, 22, 23 and 24 for A+ Certification
Class Hours: 54 lecture/54 lab total (when offered in the Distance Education format, hours will total 216)
This course provides the student with the knowledge and skills to pass the A+ Core Hardware and the A+ OS Technologies certification tests. The CompTIA A+ certification exams are nationally recognized, and measures essential competencies for an entry-level computer technician. Topics covered are microcomputer architecture, personal computer hardware, including Microsoft Windows installations, configurations and troubleshooting. Students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. This course may be offered in a distance education format.

## CIS 92 INTRO. TO COMPUTER SECURITY - SECURITY + - 3 Units

Advisory: A grade of C or higher in CIS 31
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
This course provides the student with background, requirements, policies and procedures for establishing and maintaining computer and information system security. Course elements include: Risk discovery and assessment; system planning with cost/benefits analyses; management policies; security practices and procedures within system life cycles and system recovery. The course will stress applied solutions to computer security problems, preparing students for the CompTIA Security+ Certification exam. This course may be offered in a distance education format.

## CIS 94 COMPUTER INFORMATION SYSTEMS WORKSITE LEARNING -

 1-8 UnitsGrading: Pass/No Pass Option
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## CIS 97 SPECIAL TOPICS IN MANAGEMENT INFORMATION SYSTEMS -.5-2 Units (formerly MIS 97) <br> Grading: Pass/No Pass Option <br> Class Hours: 9-36 lecture total <br> This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in management information systems. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. ** <br> **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## CIS 98 SPECIAL LAB TOPICS IN MANAGEMENT INFORMATION SYSTEMS - .5-2 Units (formerly MIS 98)

Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in management information systems. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. ** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## CIS 197 SPECIAL TOPICS IN COMPUTER TECHNOLOGY - .5-2 Units (formerly MIS 197)

Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of office technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommend for any of the Office Technologies majors or Business majors; open to anyone with an interest in the topic Note: This course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## CIS 198 SPECIAL LAB TOPICS IN COMPUTER TECHNOLOGY -.5-2 Units (formerly MIS 198)

Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in computer technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## CONSTRUCTION TECHNOLOGY (CONS)

CONS 45 CAREER PLANNING AND LEADERSHIP FOR HEAVY EQUIPMENT OPERATORS - 2 Units
Class Hours: 36 lecture total
Career opportunities and training requirements in the field of Heavy Equipment Operations will be examined. Students will be assisted in identifying career opportunities and developing career goals. Leadership skills dealing with organizing a meeting, public speaking, and leadership styles will be covered. This class is required of all Equipment Operations and Maintenance students.

CONS 46 EQUIPMENT OPERATIONS \& MAINTENANCE - 3 Units (formerly AGRI 46/ENVR 46)
Grading: Pass/No Pass Option
Limitation on Enrollment: Student must produce a negative test result in accordance with the Shasta College Student Substance Abuse Testing Policy at a student cost to be paid to the designated testing facility prior to enrolling Class Hours: 27 lecture/81 lab total
This class covers basic skill-level operation and maintenance of on- and off-road heavy equipment including agriculture and earth moving. Students will not be allowed to operate road equipment without license and driving record. Operational equipment used may include any of the following: dump truck, grader, backhoe, dozer, farm tractor, loader, excavator, forklift, and scraper.

CONS 47 PROJECT CONSTRUCTION FOR EQUIPMENT OPERATIONS 3 Units (formerly ENVR 47, AGRI 47)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in CONS 46 and a grade of C or higher in CONS 48
Note: Students will not be allowed to operate road equipment without a proper license and driving record. Students must be enrolled in the college's random drug testing program.
Class Hours: 27 lecture/81 lab total
This class teaches intermediate skill-level operation and maintenance of off-road and on-road heavy equipment. It also covers common project construction techniques utilizing heavy equipment with an emphasis on environmental concerns.

CONS 48 SURVEYING FOR EQUIPMENT OPERATORS - 2 Units (formerly AGRI 48)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in MATH 100
Class Hours: 18 lecture/54 lab tota
This course teaches basic surveying techniques and concepts with emphasis on application for heavy equipment operators. It involves basic problem solving, grade setting and checking, leveling, distance measurement, cut-fill ratio, and basic mapping. The course has a heavy emphasis on field work using various equipment and instruments including levels, compasses tapes, as well as various state-of-theart electronic surveying devices. This course will prepare students for work on a heavy equipment construction crew.

## CONS 52 RESIDENTIAL ESTIMATING - 3 Units

Class Hours: 54 lecture total
This course is designed for learning construction-estimating techniques for both small and medium sized construction projects. It includes estimating materials, costs, labor, taxes, insurance fees, overhead, profit, transportation and contingencies common in the residential construction industry. In this class students will be responsible for interpreting blueprints, developing budgets and estimates, as well as planning a construction project representative of current industry activity.

## CONS 53 MATERIALS OF CONSTRUCTION - 3 Units

Class Hours: 54 lecture total
A residential building materials course covering building materials from concrete to various types of roofing. Course covers code requirements, application and construction techniques. In this course, students will become familiar with traditional and current construction materials and their use.

CONS 54 SURVEY OF THE BUILDING INDUSTRY - 3 Units
Note: Field trips may be required
Class Hours: 54 lecture total
This course provides students fundamental instruction in the green environment, green construction practices, and green building rating systems. This course introduces students to career opportunities and lists the responsibilities and characteristics a worker should possess in the following construction careers: carpentry, electrical, heating, ventilating, and air conditioning (HVAC), plumbing, concrete, heavy equipment, sheet metal, painting and sprinkler fitting. Provides students with techniques for communicating effectively with co-workers and supervisors. Teaches the basic leadership skills required to supervise personnel. Discusses principles of project planning, scheduling, estimating, management, and presents several case studies for student participation.

## CONS 55 EQUIPMENT OPERATIONS SKILLS DEVELOPMENT - 1-4 Units

 (formerly AGRI 56EH/AGRI 55/ENVR 55)Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in CONS 46
Limitation on Enrollment: Student must produce a negative test result in accordance with Shasta College Student Substance Abuse Testing Policy at a student cost to be paid to the designated testing facility.
Class Hours: 54 lab hours per unit
The practical application of skills needed to be successful in equipment operation. Includes farm and industrial equipment such as wheel and crawler tractors, forklift, backhoe, motor grader and scraper. Service and adjustment will also be a part of this course. Required of all transfer agriculture, production agriculture, and ornamental horticulture majors. Note: This course may be repeated three times for a maximum of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

CONS 56 ESSENTIALS OF CONSTRUCTIONS - 3 Units
Class Hours: 54 lecture total
In this course, students will become familiar with traditional and current construction for safety obligations of workers, supervisors, and managers to ensure a safe workplace. Teach students the basic terms used in construction drawings, components, and symbols including the different types of drawings (civil, architectural, structural, mechanical, plumbing/piping, electrical, and fire protection) and instructs students on how to interpret and use drawing dimensions. Provide instruction the current methods to move materials and equipment from one location to another on a job site. Describes inspection techniques and load-handling safety practices. Also reviews American National Standards Institute (ANSI) hand signals. This course covers OSHA-10 training requirements and application.

CONS 71 WOODWORKING - 3 Units (formerly CONS 71A)
Class Hours: 36 lecture/54 lab total
Course is designed to develop interest in the fundamentals of woodworking. Instruction is given on safety, wood identification, proper gluing techniques, abrasives, and proper use of hand tools, power and pneumatic tools on machinery.

CONS 72 CABINETMAKING - 3 Units (formerly CONS 71B)
Prerequisite: A grade of C or higher in CONS 71
Class Hours: 36 lecture/54 lab total
This course will enable the student to have an understanding of cabinet standards, typical types found in most kitchens, bathrooms and garages. Styles of kitchens, types of layouts for all four basic case type cabinets. Be able to select counter tops, drawer construction and door construction.

CONS 73 FURNITURE AND CABINET FINISHING - 3 Units (form. CONS 71C) Prerequisite: A grade of $C$ or higher in CONS 71
Class Hours: 36 lecture/54 lab total
This course is designed to teach inorganic as well as organic finishing in vocational and industrial applications. It is divided into sections which describe various categories in the broad field of cabinet finishing.

CONS 74 TRIM AND DETAIL FINISHING - 3 Units (formerly CONS 71D)
Prerequisite: A grade of C or higher in CONS 71
Class Hours: 36 lecture/54 lab total
This course will provide essential knowledge and skill related to deck, closet treatments, inside and outside window and door treatments.

## CONS 84 ANALYSIS OF CONSTRUCTION DRAWINGS AND SPECIFICATIONS - 3 Units

Class Hours: 54 lecture total
An in-depth study of construction plans and specifications, including reading and interpreting construction documents from various private and public designers and determining quantities and types of materials used in both building and general engineering construction.

CONS 94 CONSTRUCTION TECH. WORKSITE LEARNING - 1-8 Units
Limitation on Enrollment: Students must have completed 30 units of required construction technology course work. Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
This course is designed for employment on approved jobs related to the students major and is supervised by a College representative to ensure that the work experience is of educational value. Good work habits through actual job performance is stressed. One to four units per semester may be taken depending on hours and nature of jobs. One unit of worksite learning credit is granted for 75 hours paid or 60 hours non-paid of on-the-job activity. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

CONS 148 SURVEYING AND GRADE SETTING FOR CONSTRUCTION - 1 Unit (formerly AGRI 148)
Grading: Pass/No Pass Only
Note: Previous construction experience will be helpful
Class Hours: 9 lecture/27 lab total
This is an advanced level course designed to give the participants practical skills and knowledge in the latest technology and applications related to surveying for construction and grade setting. The course will emphasize skills development and hands-on exercises as well as provide an opportunity for participants to discuss related topics with industry leaders.

## CONS 149 CLASS A \& B LICENSE TRAINING - 1 Unit

 (formerly ENVR 149, AGRI 149)Grading: Pass/No Pass Only
Prerequisite: A grade of C or higher in CONS 46
Note: Students will not be allowed to operate road equipment without a proper license and driving record. Students must be enrolled in the college's random drug testing program. Students must produce a negative test result in accordance with Shasta College Student Substance Abuse Testing Policy at a student cost to be paid to the designated testing facility.
Class Hours: 9 lecture/27 lab total
This is an advanced level course designed to give the participants practical skills and knowledge in the operation and safety of on-road heavy equipment. The course will emphasize safe operation skills, pre-operation inspections and Department of Motor Vehicles Class A and B license training as it pertains to operating on-road heavy equipment.

CONS 150 INTRODUCTION TO RESIDENTIAL CONSTRUCTION - 3 Units Class Hours: 54 lecture total
This course is recommended for entry-level students in the construction trades. Instruction will include tool safety, estimating costs, foundations, framing, plumbing, electrical, mechanical, and finish carpentry work. The student will gain a basic knowledge of the building trades.

## CONS 160 CARPENTRY PRACTICES - 5 Units (formerly CONS 151/152,

 151A/151B)Class Hours: 72 lecture/54 lab total
The purpose of this course is to train students to become competent in the construction field. Related information including interpretation of layout, estimation of construction costs and choice quantities of materials will be emphasized. Basic skills will be developed with each phase of the job: foundation, framing, exterior and interior trim, and cabinet work. Basic information of building codes will be covered.

## CONS 161 ELECTRICAL, PLUMBING AND MECHANICAL SYSTEMS - 5 Units (formerly CONS 154/155)

Class Hours: 72 lecture/54 lab total
This course is designed to give the student a basic understanding of all electrical, plumbing and mechanical systems and to familiarize them with the applicable construction codes, materials and skills.

## CONS 168 GENERAL SHOP/WOODWORKING - 2 Units

Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
A skill development course in furniture construction. Course activities will stress power tool setup and use. Related instruction will include wood selection and ordering, furniture plan reading and development, joints, adhesives, abrasives, finishes, furniture hardware, and fasteners. Students will select projects that will demonstrate skills. Note: Since skills are enhanced by supervised practice and repetition, this course may be repeated three times for a total of four enrollments.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## CONS 178 BUILDING CODES AND STANDARDS - 3 Units

Class Hours: 54 lecture total
This course is designed to provide the craftsperson, building, designer, and inspector with knowledge and insight regarding building regulations and requirements for minimum construction guidelines and specifications. It covers the use of the latest Uniform Building, Plumbing, Mechanical and Electric Codes and assists in using them to the builder's advantage. The class also provides information on sources of assistance and publications to meet the needs for dwelling construction industry.

## CONS 197 SPECIAL TOPICS IN CONSTRUCTION TECH - .5-2 Units

Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge and historical issues in the field of Construction Technology. A different topic will be addressed each time the class is taught. Recommended for Construction Technology majors; open to anyone with an interest in this topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

[^5]
## CULINARY ARTS (CULA)

The following courses will require extensive reading and math exercises.
CULA 45 BASIC FOOD PRODUCTION - 5 Units
Corequisite: Students must be concurrently enrolled in, or have completed CULA 50 with a grade of C or higher
Class Hours: 18 lecture/216 lab total
This is a beginning laboratory course in food preparation and presentation including cooking equipment, techniques, and safety procedures, using weights and measures, and interpretation of recipes. Product identification and basic cooking techniques and procedures based on nutrition and classic preparation methods are presented. Students are provided the hands-on experience in preparing meals by following recipe structure and using and modifying recipes based on knowledge gained through the course. Food preparation is produced in a time-restricted setting to prepare for functioning in a commercial kitchen. This course is designed for students interested in pursuing a career in Culinary Arts/Culinary Management.

CULA 46 ADVANCED FOODS - 5 Units
Prerequisite: $A$ grade of $C$ or higher in CULA 45 and a grade of $C$ or higher in CULA 50
Class Hours: 18 lecture/216 lab total
This course examines advanced principles of food preparation of foods served in restaurants. Emphasis given to the planning and preparation of food products relating to restaurants, hotels, and specialty food operations.

CULA 48 GOURMET FOOD PREPARATION - 3 Units
Prerequisite: A grade of $C$ or higher in CULA 46 and a grade of $C$ or higher in CULA 50
Class Hours: 27 lecture/81 lab total
This course is designed to teach advanced food preparation techniques and methods. Students learn the science of scratch cookery through small batch assignments. Areas of focus include gourmet items, buffet specialties, hors d'oeuvres, and canapés, while practicing presentation and garnishing. Small scale preparation is produced in a time-restricted quality-minded setting. This course is for students pursuing a career in culinary arts/culinary management.

CULA 49 MENU PLANNING AND COST ANALYSIS - 2 Units
Class Hours: 36 lecture total
This course is designed to summarize the basic principles of menu planning and layout for various food service operations. Topics included are pricing, nutrition, and types of menus.

## CULA 50 SANITATION \& SAFETY (formerly CULA 150) - 2 Units

Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 36 lecture (when offered in the Distance Education format, hours will total 108)
This course provides safety and sanitation principles and practices for personal and institutional application. Methods and techniques for handling foods safely are examined including food preparation, storage, service, and the prevention of food contamination. Also covered are the importance of microorganisms, food borne illness and food allergies, sanitary facilities and equipment, accident prevention, crisis management, and pest management. Compliance with city, state, and federal health regulation as embodied in HACCP (Hazard Analysis Critical Control Point) are emphasized, along with the supervisor's responsibilities in maintaining high standards of these principles. This course will provide updated information on USDA, FDA, Codex, and ISO 24,000 regulations and their relationship to food borne illness. The student receives a certificate of completion from the Educational Foundation of the National Restaurant Association upon the successful completion of this course with a passing grade of $75 \%$ or higher. This course will provide the safe use of culinary equipment and its proper use to avoid accidents. This course is required for all Culinary Arts/Culinary Management students and is advised to be taken as the first course prior to all other culinary courses or in conjunction with the first few. It may be used for American Culinary certification and recertification, and is required for the Dietary Service Supervisor Certificate offered by the Nutrition Department. This course may be offered in a distance education format.

CULA 55 PURCHASING - 2 Units (formerly CULA 155)
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 36 lecture total (when offered in the Distance Education format, hour will total 108)
This course will cover the function of purchasing from the viewpoint of management. It discuses channels of distribution, buying techniques, specification writing and other principles needed to perform this critical activity. This course may be offered in a distance education format.

CULA 59 CATERING AND EVENT PLANNING - 3 Units
Prerequisite: A grade of $C$ or higher in CULA 45 and a grade of $C$ or higher in CULA 50
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher; concurrent enrollment in CULA 94
Class Hours: 36 lecture/54 lab total
This course provides practical experiences designed to supplement the basic curriculum and includes special cooperative educational opportunities set up with the College and approved Chefs. Experiences include special and short order food preparation and service, buffet service, catering, dining room management and service and receiving and storeroom procedures. Large scale and small quantity preparation is produced in a time restricted quality minded setting. This course is for students pursuing a career in culinary arts/culinary management.

## CULA 60 BEVERAGE MANAGEMENT - 2 Units

Class Hours: 36 lecture total
Identification, production, purchasing, and service of spirits, wine and beer products. Marketing, menu development, and cost controls of a beverage operation. Special emphasis on staffing, training, and legal regulations for beverage sales.

CULA 65 DINING ROOM SERVICE - 3 Units
Class Hours: 27 lecture/81 lab
In this course, students will learn in a live environment, the skills and techniques of the "front of the house" service staff. Throughout this course, students will rotate through basic dining room positions, learning and practicing their skills in front of dining room guests, in our public dining facility. Emphasis will be on the basic serving techniques and on customer satisfaction.

## CULA 66 WINE WITH FOOD - 2 Units

Limitation on Enrollment: Students must be 21 years of age or older to take this course.
Class Hours: 36 lecture total
This course is designed to teach students the applied approach to match wine and food from different parts of the world using flavors, textures, and components present in food and wine as complementing strategies. Emphasis on menu planning, preparation of foods, cooking methods, and tasting wines with food. Concepts can be applied to home preparation of food with wine, restaurant food production with wine, and dining out.

## CULA 73 INTRODUCTION TO WINES - 2 Units

Grading: Pass/No Pass Option
Limitation on Enrollment: Students must be 21 years of age or older to take this course
Class Hours: 36 lecture total
Characteristics of wines from the major varietals emphasized. Identification of wines from the wine districts of California, France, Germany, and Italy. The concept of food and wine pairing will also be evaluated.

## CULA 74 BASIC WINEMAKING - 2 Units

Grading: Pass/No Pass Option
Limitation on Enrollment: Students must be 21 years of age or older to take this course.
Class Hours: 27 lecture/27 lab
This is a course in the basic science and technology of winemaking. It is intended for the entrepreneur exploring business opportunities in the grape wine industry, and/or the prospective small winery employee, as well as the home winemaker, interested in career or skills development. Hands-on winemaking from crush through fermentation will be covered.

## CULA 75 PASTRY - 2 Units

Prerequisite: A grade of C or higher in CULA 50 and a grade of C or higher in CULA 172
Class Hours: 18 lecture/54 lab total
This course covers fundamental baking skills for students who intend to specialize in baking and pastry making for commercial production. Production of yeast and quick breads, cakes, cookies, pies, and pastries, as well as decorating and icings are undertaken, with emphasis placed on more sophisticated items and gourmet specialties including cakes and pastries for weddings, birthdays and special occasions. Gourmet baked items and pastries are produced in a time-restricted quality-minded setting. This course is for students pursuing a career in culinary arts/culinary management.

## CULA 76 INTERMEDIATE WINEMAKING - 2 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in CULA 74
Limitation on Enrollment: Students must be 21 years of age or older to take this course.
Class Hours: 27 lecture/27 lab
This is an intermediate course in the science and technology of winemaking. It is intended for the entrepreneur exploring business opportunities in the grape wine industry, and/or the prospective small winery employee, as well as the home winemaker, interested in career or skills development. This course encompasses winemaking in the realms of wine analysis, chemistry, and treatments.

## CULA 78 SENSORY EVALUATION OF WINE - 2 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in CULA 73 or CULA 66
Limitation on Enrollment: Students must be 21 years of age or older to take this course. Class Hours: 36 lecture
This course will provide the student a better understanding of wine by learning about the senses and how to use them. Students will learn how to describe wines precisely, practice tasting varietals, learn how to judge good and bad wines, and how a wine's sensory characteristics are created in the vineyard and the winery.

CULA 80 WINE SALES AND MARKETING - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture (when offered in the Distance Education format, hours will total 162)
This course explains the principles and strategies of wine marketing and sales. The information covered will help winery personnel or distributors understand this unique market. Students will develop a successful marketing plan. This course may be offered in a distance education format.

CULA 82 WINES OF CALIFORNIA - 3 Units
Grading: Pass/No Pass Option
Limitation on Enrollment: Students must be 21 years of age or older to take this course
Advisory: A grade of $C$ or higher in CULA 73
Class Hours: 54 lecture
This class focuses on how California has become a focal wine producing area in the world in less than 25 years. The course traces the dramatic progress of the California winemaking industry--the who, how, why, what, and where. Insight is provided into the ways in which West Coast vintners are working to create extraordinary wines, and to explain the myriad of developments in character, quality, and technology that have taken place. The course and text look at how new approaches to wine making have contributed to California's current high status in the world order of wine. Sensory evaluation of applicable wines is part of the course.

CULA 88 WINES OF THE NORTH STATE - 1 Unit
Grading: Pass/No Pass Option
Limitation on Enrollment: Students must be 21 years of age or older to take this course
Advisory: A grade of C or higher in CULA 73
Class Hours: 18 lecture
A short course, including history, viticulture practices and winemaking styles of the North State wines of California, specifically Shasta, Tehama, and Trinity Counties. Sensory evaluation of representative wines is also covered.

## CULA 94 CULINARY ARTS WORKSITE LEARNING - 1-8 Units

Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## CULA 97 PECIAL TOPICS IN CULINARY ARTS - .5-2 Units

Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in culinary arts. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## CULA 98 SPECIAL LAB TOPICS IN CULINARY ARTS - .5-2 Units

Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in culinary arts. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. ${ }^{* *}$
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

CULA 159 STOCKS, SOUPS, SAUCES \& BASIC CULINARY PREPARATION 2 Units
Corequisite: Students must be concurrently enrolled in, or have completed CULA 50 with a grade of C or higher
Class Hours: 18 lecture/54 lab total
Demonstration and practical application in the preparation of various stocks, soups, and sauces involving different methods of cooking meat, fish, seafood, poultry and vegetables. The uses of culinary terms, equipment and hand tools will be applied to preparation of stocks, soups, and sauces. Emphasis is placed on the development, organization and carrying out of recipe standardization, need and procurement of supplies, work stations, and attractive service.

## CULA 161 THE ART OF GARDE MANGER (PREPARATION AND <br> PRESENTATION OF GARNISHED FOODS) - 2 Units

Corequisite: Students must be concurrently enrolled in, or have completed CULA 50 with a grade of C or higher
Class Hours: 18 lecture/54 lab total
This laboratory course builds on skills previously learned while the student studies traditional upscale pantry preparation. Topics covered include hors d'oeuvres, canapés, pates, terrines and charcuterie. Artistic displays including buffet tables, centerpieces, culinary showpieces are presented. The student gains practical experience preparing and serving theme buffets for guests. Small and large scale preparation is produced in a time-restricted quality-minded setting. This course is for students pursuing a career in culinary arts/culinary management.

## CULA 172 BAKING - 2 Units

Corequisite: Students must be concurrently enrolled in, or have completed CULA 50 with a grade of C or higher
Class Hours: 18 lecture/54 lab total
This course covers fundamental baking skills for students who intend to specialize in baking and pastry making for commercial production. Production of yeast and quick breads, cakes, cookies, pies, and pastries, as well as decorating and icings are undertaken. Gourmet baked items and pastries are produced in a time-restricted quality-minded setting. This course is for students pursuing a career in culinary arts/culinary management.

## DANCE (DAN)

DAN 10 DANCE COMBINATIONS - .5-1 Unit
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Introduction to the fundamental movement, technique, terminology, choreography, and philosophy of jazz, ballet, and modern dance. Note: This course may be repeated once for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

## DAN 15 CHOREOGRAPHY \& DANCE ANALYSIS - 1 Unit

Grading: Pass/No Pass Option
Advisory: Previous dance experience or concurrent enrollment in dance classes Class Hours: 54 total activity
Introduction to the fundamentals of choreography for concert dance. This course will explore the elements of space and its use. Students portray a topic of interest through a dance discipline, experimenting with movement style and choice of music accompaniment. The course will include analysis and critique of the student's own work, the work of other students and of professional and historic choreography. Students will have the opportunity to audition completed works for Shasta College Dance Concerts. Note: This course may be repeated once for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

## DAN 16 CHOREOGRAPHY AND DANCE ANALYSIS 2-1 Unit

Grading: Pass/No Pass Option
Advisory: Previous dance experience or concurrent enrollment in dance classes Class Hours: 54 total activity
This is a continuation of the fundamentals of choreography. The class will expand on concert dance into commercial work and musical theater; working within the parameters of someone else's criteria. The course will elaborate on the elements of space and its use. Students may come up with their own topics of interest, using a dance discipline of their choice for choreography. Analysis and critique of the works presented will include professional and historical choreography references. Students will be invited to audition completed works for presentation at the Shasta College dance concerts. Note: This course may be repeated once for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

## DAN 20 MODERN DANCE I-.5-1 Unit (formerly PE 40, HPE 36AB)

Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Fundamental movement, techniques, terminology, basic rhythm and simple choreography of modern dance. Note: This class may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.

## DAN 21 MODERN DANCE 2 - .5-1 Unit (formerly PE 43, HPE 47AD, HPE 36CD) <br> Grading: Pass/No Pass Option

Class Hours: 27 or 54 total activity
A class for modern dance students interested in more technical and sophisticated performing and choreography. Note: This course may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

DAN 30 BALLET 1 - .5-1 Unit (formerly PE 41, HPE 37AB)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
This course is an introduction to the art form of classical concert dance and includes beginning classical technique, emphasis on body placement, introduction to classical ballet terminology used worldwide, recognition of the musical rhythms that accompany specific historic steps, beginning choreography of most used ballet step combinations and patterns. NOTE: This course may be repeated once for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

DAN 31 BALLET 2 - .5-1 Unit (formerly PE 44, HPE 45AD, HPE 37CD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
This is a class for ballet students interested in developing a more technical and sophisticated aspect of classical dance. Students will be instructed in the process of the classical exercises and be able to identify their purpose. Students will gain knowledge of the different schools of thought and the terminology of classical dance.
There are performance and choreographic requirements and opportunities. Note: This course may be repeated once for a total of two enrollments, as skills and proficiencies are enhanced by supervised repetition

DAN 32 BALLET 3 - POINTE AND PARTNERING - .5-1 Unit
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in DAN 30 or DAN 31
Class Hours: 27 or 54 total activity
This is an intermediate level of ballet for the student who is ready to approach the art of classical technique that involves dancing on pointe and the fundamentals of partnering another dancer. This class will expand on an intermediate level of knowledge of classical dance that can be gained through enrollment in DAN 30 or DAN 31. Students will be taught original variations from past masters as well as contemporary work of choreographers working today. Performance opportunities are available each semester. Note: This course may be repeated once for a total of two enrollments since strength, skills and proficiencies are enhanced by supervised repetition and practice.

DAN 40 JAZZ DANCE 1 - .5-1 Unit (formerly PE 42 and HPE 72AB)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Fundamental movement, techniques, terminology, basic rhythm, and simple choreography of jazz dance. Note: This class may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

DAN 41 JAZZ DANCE 2 - .5-1 Unit (formerly PE 45, HPE 72CD, HPE 46AD) Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
A class for jazz dance students interested in more technical and sophisticated performing and choreography. Note: This course may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

DAN 50 TAP DANCE 1 -. 5-1 Unit (formerly PE 46)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
This class will introduce beginning sounds of tap. It will build technique, both physical and mental of this classic art form. Note: Course may be repeated three times for a total of four enrollments since skill and proficiencies are enhanced by repetition and practice.

## DENTAL (DNTL)

DNTL 10 ORAL BIOLOGY - 3 Units
Limitation on Enrollment: Enrollment in the Dental Hygiene Program Class Hours: 54 lecture/18 lab total
The study of embryology and histology of oral structural formation, clinical recognition of normal oral structures, the physiological and structural functions of teeth and supporting tissues, and oral anatomy relative to proper dental hygiene procedures.

## DNTL 11 ORAL RADIOLOGY - 3 Units

Limitation on Enrollment: Enrollment in the Dental Hygiene Program Class Hours: 36 lecture/54 lab total
This course focuses on radiation physics, biology, protection, quality, dental techniques, film processing and mounting, interpretation of errors, recognition of anatomical landmarks, and evidence of pathologies. Students practice skills on
radiographic models and student patients in a clinical setting; all skills are taught to clinical competence. This course builds on basic and dental sciences and prepares for clinical dental hygiene practice.

## DNTL 12 HEAD AND NECK ANATOMY - 2 Units

Limitation on Enrollment: Enrollment in the Dental Hygiene Program
Class Hours: 27 lecture/27 lab total
This course studies the anatomical structures of the head and neck regions and relates these structures to the clinical practice of Dental Hygiene.

DNTL 13 DENTAL HEALTH EDUCATION/SEMINAR - 2 Units
Limitation on Enrollment: Enrollment in the Dental Hygiene Program
Class Hours: 36 lecture total
Principles and practices of prevention and control of dental disease with emphasis on nutrition, and plaque control, motivation and chairside patient education.

DNTL 14 INTRODUCTION TO CLINIC - 4 Units
Limitation on Enrollment: Enrollment in the Dental Hygiene Program
Class Hours: 36 lecture/108 lab total
Introduction to all clinical procedures and skills needed for Dental Hygiene.

DNTL 20 LOCAL ANESTHESIA AND NITROUS OXIDE - 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, and DNTL 14
Class Hours: 18 lecture/54 lab total
Covers the pharmacology and physiology of local anesthetic agents and effective technique in delivery of these agents to the oral cavity. Focuses on the anatomy of the nerves, physiology of nerve conduction, and how anesthesia works. Discusses the prevention and management of associated emergencies. Skills are practiced in a clinical setting on student patients: all skills are taught to clinical competence.

DNTL 21 GENERAL AND ORAL PATHOLOGY - 4 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14.
Class Hours: 72 lecture total
Pathological processes of inflammation, immunology defense, degeneration, neoplasm, developmental disorders, healing and repair. Recognition of abnormalities in the human body with a special emphasis on normal and abnormal conditions in the oral cavity.

DNTL 23 PATIENT MANAGEMENT AND GERIATRICS - 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14.
Class Hours: 36 lecture total
This course teaches characteristics of individual patients, motivation, and management of same and interpersonal communication. Treatment of the compromised patient and myofunctional therapy is presented.

DNTL 24 CLINICAL PRACTICE I-4 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14.
Class Hours: 18 lecture/162 lab total*
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
Provides beginning clinical experience in the treatment of adult and child patients. Various clinical procedures utilizing scaling and polishing techniques, oral inspection, cancer screening, dental and periodontal charting, principles of ultrasonic scaling, plaque control instruction and fluoride application will be taught.

DNTL 25 CLINIC I SEMINAR - 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14.
Class Hours: 36 lecture total
Provides expanded learning opportunities related to clinical dental hygiene care through lecture, demonstrations and guest speakers.

## DNTL 26 NUTRITION IN DENTISTRY - 1 Unit

Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13, and DNTL 14
Class Hours: 18 lecture total
Provides the basic principles of nutrition and their relationship to dental health. To teach students to perform dietary surveys on clinic patients and to plan nutritional dietary programs.

DNTL 27 SUMMER CLINIC 27-1 Unit
Grading: Pass/No Pass Only
Prerequisite: Completion of DNTL 11, DNTL 12, DNTL 14, DNTL 20, DNTL 23, DNTL 24
Class Hours: 54 lab total
This course will provide students with the opportunity to become more proficient in the clinical skills learned and practiced during previous clinical courses including instrumentation techniques, patient assessment, and administration of local anesthesia.

DNTL 30 PERIODONTOLOGY I-3 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 54 lecture total
A course in Periodontology teaches the scientific study of the structures and function of the periodontium in both health and disease, the etiology and principles of periodontal diseases, examination procedures, treatment and preventative measures.

DNTL 31 PHARMACOLOGY - 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 36 lecture total
Focuses on pharmacology as it affects the clinical practice of dentistry. Emphasizes drugs commonly used in dentistry, for treatment of common systemic and oral diseases, and for emergency treatment: effects, administration, and toxicology. Builds on basic and dental sciences and prepares for clinical dental hygiene practice.

DNTL 32 DENTAL MATERIALS - 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 36 lecture/18 lab total
Presents the history, composition, chemical and physical properties and use of materials commonly utilized in the dental laboratory and dental operatory. Builds on dental sciences. Provides laboratory experience in performing common dental laboratory procedures and prepares for the clinical practice of extended functions. All skills are taught to competence.

DNTL 33 ADVANCED CLINICAL TOPICS - 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 36 lecture total
This course is designed to present advanced topics and current technology used in the dental and dental hygiene field such as soft tissue curettage, root morphology and periodontal instrumentation, oral brush biopsy, non-surgical periodontal dressings, care for dental implants, oral maxillofacial surgery and orthodontics.

## DNTL 34 CLINICAL PRACTICE II - 4 Units

Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 216 lab total
Advanced skills of dental hygiene practice, including assessment and treatment are practiced on patients in a clinical setting, with emphasis on planning and comprehensive treatment; all skills are taught to clinical competence. Expands on the procedures and techniques introduced in previous preclinical and clinical courses. Builds on basic and dental sciences and prepares for clinical dental hygiene practice.

## DNTL 35 CLINICAL II SEMINAR - 1 Unit

Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 18 lecture total
Provides an expanded learning experience through discussion of dental hygiene care for the culturally diverse, tobacco cessation counseling, and seminar study of clinical cases. Builds on basic and dental sciences and prepares for clinical dental hygiene practice.

## DNTL 40 PERIODONTOLOGY II - 1 Unit

Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35
Class Hours: 18 lecture total
A course to enhance assessment skill applicable in the treatment of patients with advanced periodontal disease. To teach the dental hygienist ethical and clinical responsibility in periodontal disorders and to teach the relationship of the specialty practice of periodontics within the broad scope of dentistry and the legal ramifications thereof.

DNTL 41 PRACTICE AND FINANCIAL MANAGEMENT - 1 Unit
Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34, and DNTL 35
Class Hours: 18 lecture total
Office practice management; ethical and legal aspects of dentistry and dental hygiene, and business matters relating to dental hygiene practice.

## DNTL 42 CLINIC III SEMINAR - 2 Units

Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34, and DNTL 35
Class Hours: 18 lecture/54 lab total
Provides an expanded clinical experience exposure through independent study or additional clinical experience.

DNTL 43 CLINICAL PRACTICE III-4 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35
Class Hours: 216 lab total
Provides students with the opportunity to become more proficient in the clinical skills learned and practiced in previous clinical courses and to prepare them for success on their state and national board examinations.

DNTL 44 COMMUNITY ORAL HEALTH - 3 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35
Class Hours: 54 lecture total
Introduces students to the principles and practices of dental public health. The emphasis is placed on the role of the dental hygienist as an innovator of, and an educator in community health programs. Public health issues will be introduced and completely discussed.

DNTL 45 ETHICS AND JURISPRUDENCE - 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35
Class Hours: 36 lecture total
The study of the fundamental factors necessary to be employed and practice within the ethical and legal framework of the State Dental Practice Act and the Code of Ethics of the American Dental Association.

DNTL 54 SUMMER CLINIC 54-1 Unit
Grading: Pass/No Pass Only
Prerequisite: A grade of C or higher in each of the following courses: DNTL 14, DNTL 20, DNTL 24, DNTL 30, DNTL 34, DNTL 43
Class Hours: 54 lab total
This course will provide students with the opportunity to become more proficient in the clinical skills learned and practiced during previous clinical courses and to prepare for success on their state clinical licensing examinations. This course is offered on a pass/no pass basis only.

## DIESEL TECHNOLOGY (DIES)

NOTE: STUDENTS MUST PROVIDE THEIR OWN HAND TOOLS FOR TECHNICAL CLASSES IN THE DIESEL TECHNOLOGY AND AUTOMOTIVE TECHNOLOGY MAJORS IN ORDER TO COMPLETE REQUIRED COURSE OBJECTIVES.

DIES 30 HYDRAULIC TROUBLESHOOTING - 1 Unit
Prerequisite: A grade of C or higher in DIES 48
Class Hours: 9 lecture/27 lab total
This class is intended to demonstrate safe and effective troubleshooting procedures as required for industrial and mobile hydraulic equipment.

## DIES 48 HYDRAULICS - 3.5 Units <br> Grading: Pass/No Pass Option

Class Hours: 54 lecture/27 lab total
A study of the theory, application, and component parts of hydraulic systems. This course will emphasize fundamentals in dismantling, inspection, and troubleshooting hydraulic components and complete systems. Closed-loop application, inspection and trouble-shooting will be studied. This course is required for all Diesel Technology, Welding Technology and Equipment Operations and Maintenance majors.

## DIES 49 ADV. HYDRAULICS (formerly AGRI 49) - 3 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of $C$ or higher in DIES 48
Class Hours: 36 lecture/72 lab total
This course will emphasize the application of cylinders and motor used to control fluid power systems. Hydraulic-pneumatic circuitry, maintenance, repair, and closed loop drives will be covered. Recommended for Equipment Operations and Maintenance, production, agriculture, and diesel majors.

## DIES 94 DIESEL TECHNOLOGY WORKSITE LEARNING - 1-8 Units

Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

DIES 160 DIESEL ENGINE ELECTRONIC CONTROL - 4 Units
Class Hours: 54 lecture/54 lab total
This course will cover electronic diesel engine control systems as related to testing, calibrating and diagnostic procedures. The use of industry software generated computer programs will be utilized.

DIES 161 DIESEL TECHNOLOGY FIELD TRAINING - 2 Units
Prerequisite: A grade of C or higher in DIES 162
Corequisite: Students must be concurrently enrolled in four units of DIES 94
Limitation on Enrollment: Student must be 18 years of age, provide his/her own transportation, DMV readout, and must be prepared to take a physical including drug test at the repair facility's request.
Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 108)
This course is designed to prepare the student for a career in the diesel technology field. Classroom instruction will include work-site expectations, interview techniques, and assessment of work performance. The student will be placed with local industry at various diesel repair facilities to expose them to actual industry standards. This course may be offered in a distance education format.

DIES 162 HEAVY DUTY POWER TRAIN - 4 Units
Class Hours: 54 lecture/54 lab total
This course covers shop practices in service, repair, adjustment and preventive maintenance of heavy duty drive trains.

## DIES 164 DIESEL PERFORMANCE ANALYSIS - 4 Units

Class Hours: 54 lecture/54 lab total
Diesel fuel systems, composition of fuels, combustion chamber design, manifolds, fuel and air filters, fuel transfer pumps, fuel-injection pumps and injectors are taught in this class. Mechanical and electronic fuel controls will be analyzed. You will learn testing, calibrating and diagnostic procedures, using modern test equipment. Performance analysis of diesel engines as related to the California Air Resources Board Heavy Duty Vehicle Smoke and Tampering Inspection Program as mandated by Senate Bill 1997 of 1988 will be covered.

## DIES 166 DIESEL ENGINES - 6 Units

Prerequisite: A grade of $C$ or higher in DIES 164
Class Hours: 54 lecture/162 lab total
This course is an in-depth study of various diesel engines, theory of design, operation and application. This lab will provide training in the disassembly and inspection of diesel engines, practical assembly procedures and technical analysis of engine services.

## DIES 170 HEAVY DUTY BRAKING SYSTEMS - 4 Units

Class Hours: 54 lecture/54 lab total
This course will cover the basic design and repair of foundation brakes and air systems pertaining to heavy duty vehicles.

DIES 197 SPECIAL TOPICS IN DIESEL TECH. - .5-2 Units
(P/NP Option)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of Diesel Technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Diesel Technology majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## DIETARY SERVICES SUPERVISOR (DSS)

DSS 10 FOOD PRODUCTION MANAGEMENT - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in CULA 50
Class Hours: 54 lecture (when offered in the Distance Education format, hours will total 162)
This course will cover effective management skills in food production, food purchasing policies and procedures, and the role of the Dietary Service Supervisor. Basic institutional cooking skills will be presented including using weights and measures, choosing ingredients and food preparation methods. Students will be involved in menu planning and costing, recipe standardization and recipe costing. Instruction on the selection, safety and usage of institutional equipment will be provided. This course may be offered in a distance education format.

## DSS 63 DIETARY SERVICE SUPERVISOR OPERATIONS AND MANAGEMENT - 3 Units <br> Grading: Pass/No Pass Option

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course includes methods of supervision and leadership which are applicable to the food service industry. Methods and techniques of recruitment, selection, training
and evaluation of personnel are covered. Record maintenance, enforcement of safety and sanitary standards; supervision of food service employees are stressed. This course may be offered in a distance education format.

DSS 94 DSS CERTIFICATE WORKSITE LEARNING - 1-8 Units
Prerequisite: A grade of C or higher in DSS 63 and CULA 50
Corequisite: Students must be concurrently enrolled in or have completed DSS 10 and FSS 27 with a grade of C or higher.
Limitation on Enrollment:

1. All students participating in DSS 94 must pass a drug screening and background check prior to enrollment in the course. Students are financially responsible for meeting these requirements according to the established program process.
2. Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes. Class Hours: 75 hours paid or 60 hours non-paid per unit
Students must complete 150 hours of verified, supervised field experience in a healthcare setting as required by the CA Department of Public Health (CADPH) for the DSS Certificate, and must follow the current requirements and regulations of the CADPH. The course stresses good work habits and meeting of required competencies through actual on-the-job performance with a preceptor. Students must complete a minimum of 150 hours, but may complete up to a maximum of 16 units in this WSL course in order to meet the required competencies.

## EARLY CHILDHOOD EDUCATION (ECE)

ECE 1 HUMAN DEVELOPMENT - 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course involves a study of development and behavior throughout the human life span. Classic and up-to-date research on the physical, cognitive, and psychosocial domains will be presented. Theories will be integrated with practical application concepts throughout the course, underscoring the importance of life-long learning and adaptation. This course may be offered in a distance education format.

## ECE 2 CHILD, FAMILY, COMMUNITY - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Child, Family, Community introduces the student to the interacting influences of family life and community experiences that affect the developing child. The course focuses on the primary social relationships and social settings within the context of dissimilar family patterns. The study encourages understanding and practical utilization of community systems and resources that promote quality outcomes for both preschool and school age children, families, schools, and communities. This course may be offered in a distance education format.

## ECE 3 EARLY CHILDHOOD PROGRAM ADMINISTRATION - 3 Units

Prerequisite: A grade of $C$ or higher in ECE 7
Note: This course meets the Title 22 requirements for Teacher/Director qualifications.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course identifies and assesses the principles and practices of managing early childhood programs. Course content will focus on overall administrative procedures for various programs providing care and learning for children ages zero to eight. The topics include: regulatory agencies, licensing and compliance with local and state requirements, funding and budgeting, staff selection and scheduling, and enrollment and operational policies and reports. This course may be offered in a distance education format.

ECE 6 EXPLORING FAMILY CHILDCARE - 3 Units (formerly ECE 153) Class Hours: 54 lecture total
This course provides an introduction to family childcare. Topics presented include an overview of regulations, family childcare management, application of child growth and development principles, importance of culturally diverse and age appropriate activities, and safe and healthful setting in a family childcare.

## ECE 7 EARLY CHILDHOOD OBSERVATION \& ASSESSMENT - 3 Units

Prerequisite: A grade of C or higher in ECE 1 or ECE 9
Note: Observation hours for this course will be obtained through the course lab hours at the Shasta College Early Childhood Education Center or a designated Early Childhood Mentor Site.
Class Hours: 36 lecture/54 lab total* (The lab portion of this course may be offered in a distance education format to accommodate lab hours completed at a designated Early Childhood Mentor Site. Lecture hours will be regularly scheduled hours.)
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
This course provides the student with opportunities for further study of development and behavior of young children by developing skills in observation and assessment. Recording strategies, rating scales, portfolios and multiple assessment tools are explored.

## ECE 8 TEACHING PRACTICUM FOR YOUNG CHILDREN - 5 Units (formerly ECE 8A) <br> Prerequisite: A grade of $C$ or higher in ECE 7

Note: Supervised field site experience for the California Child Development Permit will be obtained through the course lab hours at the Shasta College Early Childhood Education Center or a designated Early Childhood Mentor Site.
Class Hours: 54 lecture/108 lab total* (The lab portion of this course may be offered in a distance education format to accommodate lab hours completed at a designated Early Childhood Mentor Site. Lecture hours will be regularly scheduled hours.)
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
This course focuses on identifying, developing and refining skills and behaviors essential for effective teaching of young children. The course is intended for students who are concurrently working or volunteering in center-based programs for young children (infant, toddler, preschool or after school care) where under guided supervision they have the opportunity to work directly with the children to test the methods and refine the teaching skills explored in the course.

## ECE 9 CHILD GROWTH AND DEVELOPMENT - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides an in-depth examination of the major physical, psychosocial, and cognitive/ language developmental milestones for children, both typical and atypical, from conception through adolescence. There will be an emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages. This course may be offered in a distance education format.

ECE 10 EARLY CHILDHOOD LEARNING - 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course focuses on the developmental learning process of children ages three to eight. Attention will be given to the application of current studies providing insight into the maturational stages as they relate to the acquisition of knowledge. Topics will include: individuality, readiness, transitions, competence, and developmentally appropriate strategies during the preschool and primary school years. This course may be offered in a distance education format.

## ECE 12 INFANT TODDLER LEARNING - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course focuses on developmental research and current practices in care and learning during infancy and toddlerhood. Emphasis will be on understanding developmental stages, planning optimal environments and clarifying the care giving role of teachers and child care workers for children during the first two years of life. This course may be offered in a distance education format.

ECE 14 SCHOOL AGE AND ADOLESCENT DEVELOPMENT - 3 Units Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A course focusing on growth, development and behavior of school age children and adolescents. Current research and theoretical concepts will be discussed and analyzed for practical implications and applications to assist those living with and/or working with school age children and adolescents. This course may be offered in a distance education format.

## ECE 15 CHILD HEALTH, SAFETY AND NUTRITION - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Provides an opportunity for early childhood educators and caregivers to focus on health, safety and nutrition in children's programs. Fundamentals of a safe and healthful environment, including knowledge of state and local laws and regulations will be introduced. Key factors that ensure physical health, mental health and safety for both children and staff, and effective strategies for working collaboratively with families will be identified. Community health, safety and nutrition resources and their application to the children's curriculum will be highlighted. This course may be offered in a distance education format.

## ECE 16 FUNDAMENTALS OF EARLY CHILDHOOD MENTORING AND SUPERVISION - 2 Units

Prerequisite: A grade of C or higher in ECE 7
Advisory: A grade of C or higher in ECE 3
Class Hours: 36 lecture total
Designed to satisfy the Child Development Permit Master Teacher level and above requirement. Course content focuses on the methods and principles of supervising the adult learner in the early childhood program. Emphasis is on the role of the classroom teacher who functions as a mentor to new teachers and other adult participants while simultaneously meeting objectives for children, parents, and staff. Expanded modeling, guidance, and evaluation approaches will be examined.

## ECE 17 PRINCIPLES AND PRACTICES OF TEACHING YOUNG CHILDREN - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An examination of the underlying theoretical principles of developmentally appropriate practices applied to programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics, and professional identity. Emphasis will be placed upon increasing the student's skills in critically analyzing educational settings for young children. Special attention will be given to room arrangement, selection and storage of materials. This course may be offered in a distance education format.

ECE 20 INTRODUCTION TO CURRICULUM - 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course presents an overview of knowledge and skills related to providing developmentally appropriate curriculum and environments for young children from birth to age 8. Students will examine a teacher's role in supporting development and fostering the joy of learning for all young children using observation and assessment strategies. An overview of content areas will include but not be limited to: language and literacy, social and emotional learning, sensory learning, art and creativity, math and science. Students will acquire an understanding of the philosophies and strategies for developing and documenting integrated curricula for early childhood programs including ways to organize and implement daily, monthly, and long-range activity planning. This course may be offered in a distance education format.

ECE 22 E.C. CURRICULUM: INFANT/TODDLER CARE - 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A course focusing on the planning, preparation, and presentation of developmentally appropriate curriculum activities, materials, and learning environments for use with infants and toddlers to support physical, social-emotional, cognitive and language development. Emphasis will be placed upon increasing the student's skills in critically analyzing education settings and materials for infants and toddlers. Special attention will be given to both indoor and outdoor environments and curriculum. This course may be offered in a distance education format.

## ECE 24 E.C. CURRICULUM: SCHOOL AGE CARE - 3 Units

Class Hours: 54 lecture total
This course will examine the planning and presentation of curriculum experiences for school age children in an extended care setting. Opportunities to develop skills in enhancing the school age child's day with developmental experiences and positive social interaction will be provided. Focus will be placed on individualized and group activities to encourage the development of self-esteem, motivation for learning, and recreational skills. Special attention will be given to both indoor and outdoor environments and curriculum.

ECE 26 THE CHILD WITH SPECIAL NEEDS - 3 Units
Prerequisite: A grade of C or higher in ECE 1or ECE 9
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course will focus on early childhood education and children with special needs. Developmental, educational, and family issues related to children and youth with disabilities and giftedness will be presented. The course also provides an overview of special education as a professional discipline, including its history, laws, challenges, current trends, and issues. This course will explore different types of special needs identified in children including children who are: gifted, developmentally delayed, learning disabled, as well as children with: emotional and behavioral disorders, communication disorders, sensory disorders, neurological disorders, and health impairments. This course may be offered in a distance education format.

## ECE 27 TEACHING CHILDREN WITH SPECIAL NEEDS \& EARLY

## INTERVENTION STRATEGIES - 3 Units

Prerequisite: A grade of $C$ or higher in ECE 26
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course focuses on learning to work with children birth to eight years of age with disabilities and other special needs and their families in inclusive early childhood educational settings. It will include an exploration of the following: characteristics of young children with disabilities and other special needs; impact on the family; types of educational and other programs/services that are available; modification of the educational environment; approaches to assessment and curriculum; integration and future trends. Upon completion, students should be able to recognize atypical development, make appropriate referrals, and work collaboratively to plan, implement, and evaluate inclusion and intervention strategies. This course may be offered in a distance education format.

## ECE 28 TEACHING IN A DIVERSE SOCIETY - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Examination of the development of social identities in diverse societies including theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms, and teaching. Various early education classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society. Course includes self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, media, and schooling. This course may be offered in a distance education format.

ECE 30 E.C. CURRICULUM: PHYSICAL DEVELOPMENT - 3 Units
Prerequisite: A grade of $C$ or higher in ECE 20
Class Hours: 54 lecture total
Students will explore the factors that affect and facilitate physical growth and development of young children. The course will first explore the developmental aspects of planning appropriate experiences with application of children's assessed needs and interests. An integrated curriculum will be created with focus on three curriculum content areas: health and nutrition; music and rhythm; and perceptual and motor development. Curriculum planning for physical development will include documentation of integrated experiences, focusing on appropriate early childhood care and learning and literacy practices that strengthen children's physical abilities.

ECE 40 E.C. CURRICULUM: AFFECTIVE DEVELOPMENT - 3 Units
Prerequisite: A grade of $C$ or higher in ECE 20
Class Hours: 54 lecture total
This course is designed to offer students strategies for supporting affective development with specific guidance directed to young children's social, emotional, and creative needs. This study acquaints students with techniques for planning and implementing activities that help young learners achieve aesthetic and social awareness. An integrated curriculum will emerge with emphasis on art expression, creative dramatics, and self understanding. Students will learn to plan activities for young children with focus on language and literacy practices as well as inclusion and cultural strengths.

## ECE 50 E.C. CURRICULUM: COGNITIVE DEVELOPMENT - 3 Units

Prerequisite: A grade of C or higher in ECE 20
Class Hours: 54 lecture total
This course presents methods and rationale for enhancing young children's thinking and language abilities. Students will acquire skills to coordinate experiences that integrate activities from curriculum areas including communication and literacy, mathematics, and science. The coursework will require students to organize and implement appropriately planned activities that meet young children's needs and instructional accountability. Students will acquire strategies with focus on intentional learning for integrating literacy practices that strengthen young children's cognitive skills.

ECE 51 EARLY CHILDHOOD STAFFING AND MANAGEMENT - 3 Units Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course offers an expanded study of operational resources to manage an early care and learning program for young children. The managerial process in an early childhood education setting will be reviewed with special attention given to staff interrelationships as well as communication skills with parents and volunteers. The selection process for staffing a program for young children will be explored with study of performance evaluation, retention and professional development. This course may be offered in a distance education format.

ECE 52 GUIDANCE IN ADULT-CHILD RELATIONS - 3 Units
Class Hours: 54 lecture total
This course explores principles and strategies of positive guidance that are both effective and flexible for adults interacting with young and school age children. Cognitive, social, and emotional characteristics and needs of children will be examined. This course would be of interest to parents, educators, caregivers, and any adult involved with or interested in children.

## ECE 94 EARLY CHILDHOOD EDUC. WORKSITE LEARNING - 1-8 Units

 Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ECE 140 ESSENTIALS OF 40 DEVELOPMENTAL ASSETS - 1 Unit
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
This course offers an expanded study of the key elements necessary for children/youth to develop positive and healthy behaviors and habits. The research behind 40 Developmental Assets will be explored and action-based methods of using this research will be reviewed. Current strength-based approaches to building assets in children/youth will be analyzed. This course may be offered in a distance education format.

ECE 147 MENTAL HEALTH AWARENESS IN ECE PROGRAMS - 1 Unit Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
This course introduces the student to mental health issues in young children, their families, and their caregivers. It includes an overview of early childhood mental health from prenatal development to eight years of age, and the effects of environment and biology on mental health. Students will become aware of potential mental health concerns in early childhood, and how we can help children, parents, and caregivers in our programs. This course may be offered in a distance education format.

## ECE 152 THE YOUNG CHILD: MOVEMENT, RHYTHM, AND SINGING

 1 Unit (formerly ECE 152A)Class Hours: 18 lecture total
A course exploring advanced techniques in the planning and presentation of curriculum appropriate for young children in the areas of movement, rhythm and singing.

## ECE 155 THE YOUNG CHILD: INTRODUCTION TO THE MONTESSORI METHOD - 1 Unit (formerly ECE 152F)

Class Hours: 18 lecture total
This course will introduce the student to the teaching and theory of Dr. Maria Montessori. This method of preparing a preschool environment, which promotes independence in the young child, will be presented through lectures and demonstrations.

ECE 197 SPECIAL TOPICS IN EARLY CHILDHOOD EDUC. - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in early childhood education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

EARTH SCIENCE (ESCI)
(formerly Geology and Physical Science)
ESCI 1 PHYSICAL GEOLOGY (formerly GEOL 1, 1A) - 4 Units
Note: Required field trips.
Class Hours: 54 lecture/54 lab total
An introduction to the physical processes that drive Earth as a dynamic planet. Both internal and external processes are considered as well as their inter-relationships. Discussion in the course will include Earth's internal structure, plate tectonics, minerals and rocks and their origins, surface processes, geologic structures such as faulting and folding, metamorphism, sedimentation, soil formation, geologic time including radiometric methods, geologic hazards such as earthquakes, volcanism, mass wasting, flooding, and the vital nature of Earth materials to society. Laboratory activities will focus on the application of classroom concepts and will include mineral and rock identification, geologic structures, topographic and geologic map use, use of remote imagery, recognition of landforms, geologic time, seismology, and volcanism. Lecture and laboratory will consider geologically produced and influenced natural resources, their exploitation, and concepts centered about sustainable uses.

ESCI 2 HISTORICAL GEOLOGY-4 Units (formerly GEOL 2, 1B)
Advisory: A grade of C or higher in ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12, or ESCI 15, or ESCI 17
Note: Required day and overnight field trips.
Class Hours: 54 lecture/54 lab total
The study of Earth history as revealed in the rock record and the placement of varied geologic events through time. Discussion in this course will include the genesis of minerals and three rock types, principles of stratigraphy, geologic structures, organic evolution, relative and absolute geologic time, paleogeography, and mountain building episodes of North America with emphasis on the west coast. Plate tectonics and crustal evolution will provide a framework for the preceding. Laboratory exercises will include the description and classification of minerals and rocks; recognition of ancient metamorphic, igneous and sedimentary environments; recognition, occurrence, and geologic use of fossil organisms; application of stratigraphic principles; recognition of geologic structures; and the development and use of different types of geologic maps and cross sections.

ESCI 3 MINERALOGY AND CRYSTAL OPTICS - 5 Units (formerly GEOL 3) Prerequisite: A grade of C or higher in ESCI 1
Corequisite: Students must be concurrently enrolled in, or have previously completed CHEM 1A with a grade of C or higher
Class Hours: 54 lecture/108 lab total
An exploration into the chemistry, classification, optics and crystalline structure of minerals. Topics covered in the course will include the chemistry, bonding, and crystalline structure of minerals, recognition of crystal types, physical properties of minerals, mineral classification as well as their origins, occurrence, and use, and an introduction to the theory of optical identification of minerals. Laboratory activities will include crystallography, physical properties testing, mineral classification, and optical techniques to identify mineral crystals with an introduction to uniaxial and biaxial minerals.

ESCI 4 ROCK ORIGINS AND RELATIONSHIPS - 4 Units (formerly GEOL 4) Prerequisite: A grade of C or higher in ESCI 2 and a grade of C or higher in ESCI 3 Note: Required day field trips.
Class Hours: 54 lecture/54 lab total
A survey of igneous, sedimentary, and metamorphic rocks presented in the context of recognizing processes responsible for rock origins. Rock classification based both on mega- and microscopic textures and mineralogy is fundamental to interpretation and provides the main discussion of topic for the course and laboratory. Specialized topics include magmatic differentiation and emplacement, sedimentary rock provenance and depositional environments, and metamorphic rocks as pressure and temperature indicators. Rock assemblages will be considered with the purpose of interpreting their origins at larger scales. Field trips to various localities will observe rock assemblages that demonstrate different origins.

ESCI 5 INTRODUCTION TO GEOLOGY - 4 Units (formerly GEOL 5)
Note: Required field trip. The lecture portion of this course may be offered as distance education.
Class Hours: 54 lecture/54 lab total (when offered in the Distance Education format, hours will total 162 for the lecture portion of the class and an additional 54 hours of lab totaling 216 hours for this course.)
A survey course for non-science majors designed to introduce the discipline of geology and its vital influence on society. Among the topics to be discussed are geologic hazards such as volcanoes and earthquakes, Earth materials and economic resources, processes which shape Earth's surface, internal processes and their manifestations, environmental geology, geologic time, reconstruction of Earth history, and the fossil record. Laboratory activities include mineral and rock identification, map use, evaluation of geologic hazards associated with different geologic threats, the impacts of environmental geology and natural resources consumption on society, and economic geology and exploration for ores and petroleum deposits. Lecture and laboratory will consider concepts centered about the sustainable use of natural resources. The lecture portion of this course may be offered in a distance learning format.

## ESCI 6 ANCIENT LIFE - 4 Units (formerly GEOL 6)

Note: Required day field trips.
Class Hours: 54 lecture/54 lab total (When offered in a distance Education format, hours will total 162 for the lecture portion of the class and an additional 54 hours of lab totaling 216 hours for this course)
A survey of past life is presented through geologic and biologic investigation. This course is interdisciplinary in nature and provides geologic background and evidence for the origination and evolution of life. Associated methodologies and concepts presented include geologic time and its measure, chemical and organic evolution, controls on evolution, cladistic analysis, ancient ecological reconstruction, mass extinction and adaptive radiation, fossilization, and ancient geographic distributions of flora and fauna. Anatomical innovations that define major classes of organisms are traced through ancestor-descendant relationships. Laboratory exercises include processes of fossilization, fossil recognition, cladistic analysis, genetics, stratigraphy, reconstruction of ancient biologic communities, ancient geographic reconstruction through fossil information, functional morphology, mass extinction and adaptive radiation in the fossil record. This course may be offered in a distance education format. The lecture portion of this course may be offered in a distance education format.

## ESCI 7 INTRODUCTION TO THE GEOLOGY OF CALIFORNIA - 4 Units (formerly GEOL 7, 25)

Note: Required field trips (day trips and overnight trips)
Class Hours: 54 lecture/54 lab total
As the newest material added to North America, California geology records ancient and continued mountain building which has shaped the state into landforms and geologic features. Each geomorphic province in California records unique rock packages indicative or ancient and modern processes. Discussions in the course will include geologic hazards such as earthquakes, volcanism, and mass wasting, plate tectonics, economic resources, state and national parks, ground and surface water, soils, glaciation, coastal processes, desert land-forms, and the geologic history of the state. Laboratory exercises will include mineral and rock identification and classification, topographic and geologic maps; landforms; stratigraphy; aerial photo interpretation; and mineral, rock and data collection on field trips.

ESCI 8 PLANETARY GEOLOGY: DEVELOPMENT, HISTORY AND
PLANETARY PROCESSES - 3 Units (formerly GEOL 8, 22)
Note: Required field trips and/or evening observations when possible
Class Hours: 54 lecture total
An introduction to the physical processes that shape planetary surfaces and guide their development through time. The course will explore the origins of the solar system and use Earth as a planetary "model" to perform systematic and comparative investigations of the planets and other bodies in the solar system. Recent information gathered by Earth-based and orbiting observation platforms and unmanned planetary probes will be used to investigate planetary processes, develop planetary histories and differentiate the varied pathways and processes that have influenced each planet's evolution. The course will also consider the Sun and its influence on the planets and other bodies in the solar system, as well as asteroids, comets, meteors and impacts on planetary surfaces.

## ESCI 9 EARTHQUAKES, VOLCANOES, AND OTHER GEOLOGIC HAZARDS - 3 Units (formerly GEOL 9, 20)

Note: Required field trips
Class Hours: 54 lecture total (When offered in a distance Education format, hours will total 162. A scheduled field trip will still be required for the online course.) This introductory course considers geologic hazards and their impact on society in part through the utilization of case histories, many of which are from California. The course will focus on earthquakes and volcanism specifically considering the dynamics of these two phenomena. Other topics to be discussed include tsunami origination and development, types of mass wasting and their controlling factors and influences, and flooding. A portion of the course will also describe geologic hazards that are human influenced or caused, such as soil erosion, acid rain, ground-water contamination and ground subsidence. Engineering mitigation, hazard preparedness and remediation strategies complete the course. This course may be offered in a distance education format.

ESCI 10 ENVIRONMENTAL GEOLOGY - 4 Units (formerly GEOL 10/40) Note: Required field trips.
Class Hours: 54 lecture/54 lab total
Geologically related impacts on the environment, both natural and humaninfluenced, provide the subject content for this course. Emphasis is placed on human and environmental interactions with discussions regarding natural resources and their exploitation, pollution and waste disposal, climate change, land use and engineering, and energy resources. Earth processes which result in environmental catastrophes, environmental change, and an impact on society are also considered including topics such as earthquakes, volcanism, flooding, mass wasting, coastal processes, and climate trends. Laboratory activities will focus on Earth materials, water resources and contamination, hazardous waste storage, mining and resource exploitation, and pollution.

## ESCI 11 ECONOMIC GEOLOGY - 3 Units (formerly GEOL 11)

Prerequisite: A grade of C or higher in ESCI 1 and a grade of C or higher in ESCI 3 Note: Required field trips.
Class Hours: 36 lecture/54 lab total
An introduction to economic deposits, their origins and associations, and recovery. This course will review the basic geological concepts in the context of economic deposits and then apply those concepts to exploration, evaluation, and recovery. Industrial and precious metals as well as fossil fuels (oil, gas, and coal) will provide the main focus of the course. Exploration techniques in geophysics, remote imagery, and computer-aided analysis will also be considered. Laboratory exercises will evaluate material for its economic potential using the identification of mineral and rock associates, geologic maps and remote images, and geophysical techniques and data collection. Additionally, the volume, value, and recovery costs of an ore deposit will be reviewed.

## ESCI 12 GENERAL EARTH SCIENCE - 4 Units (formerly PHSC 2/PHSC 2

 and PHSC 3)Note: Required field trips. The lecture portion of this course may be offered as distance education.
Class Hours: 54 lecture/54 lab total (when offered in the Distance Education format, hours will total 162 for the lecture portion of the class and an additional 54 hours of lab totaling 216 hours for this course.)
A survey course designed for non-science majors which spans the Earth-related sciences, including geology, oceanography, meteorology, and astronomy. In general, the course focuses on physical processes and materials as related to each discipline. Topics include the geologic evolution of the Earth, economic resources derived from the Earth, Earth materials, evolution and character of the oceans, ocean-atmosphere interactions, atmospheric processes including weather and climate, the solar system and Earth as part of the universe. Using an Earth systems approach, lecture and laboratory will consider concepts centered about the sustainable use of natural resources. The laboratory portion of this course provides hands-on activities that support and demonstrate lecture concepts. The lecture portion of this course may be offered in a distance learning format.

ESCI 14 METEOROLOGY - 4 Units (formerly PHSC 4
Class Hours: 54 lecture/54 lab total
Dynamic aspects of the atmosphere responsible for climate and weather represent the main focus of this course. Topics include atmospheric composition, solar radiation, global heat transfer, atmospheric moisture, pressure and atmospheric circulation, air masses, weather patterns and forecasting, storms including hurricanes and tornadoes, air pollution and ozone, and global climate changes. Applicable fundamental science concepts such as state changes, heat transfer mechanisms, and the physical and chemical aspects of the media involved in weather are also introduced. Laboratory exercises will include analyses of incoming solar radiation, heat transfer in the atmosphere, humidity measurements, atmospheric motion, weather maps, storm characteristics, and climate controls and climate change. Lecture and laboratory will consider influences on the atmosphere that disrupt sustainable, stable climate conditions.

ESCI 15 OCEANOGRAPHY - 4 Units (formerly PHSC 5)
Note: Required overnight field trip.
Class Hours: 54 lecture/ 54 lab total (when offered in the Distance Education format, hours will total 162 for the lecture portion of the class and an additional 54 hours of lab totaling 216 hours for this course.)
Global ocean dynamics are part of an intricate system that influences world climate and both terrestrial and oceanic life. Basic principles and concepts are presented including ocean origins, ocean basin formation, seawater composition and characteristics, oceanic circulation, and the marine habitat providing a holistic view to the study of the oceans. Coastal processes such as waves and tides, erosion and deposition, and landforms are also considered. Laboratory activities will survey marine geology including plate tectonic and ocean basin topography, chemical oceanography, physical oceanography such as circulation, waves and tides, and biological oceanography including marine organisms, marine ecosystems and nutrient flow. Lecture and laboratory will consider marine produced and influenced natural resources, their exploitation, and concepts centered about sustainable uses. The lecture portion of this course may be offered in a distance education format.

## ESCI 16 COASTAL OCEANOGRAPHIC FIELD STUDIES - 2 Units (formerly PHSC 6)

Note: Required overnight field trip.
Class Hours: 27 lecture/27 lab total
An introduction to the coastal oceanography of northern California and coastal habitat evaluation. The course will include a three-day field trip along the northern California coast. In general, the course will focus on oceanographic concepts associated with estuaries, tidal flats, sandy shores, rocky shores, lagoons, and the shallow continental shelf. Lecture meetings will present basic concepts in oceanography including chemical, physical, geologic, and biologic realms, as related to the coastal zone and with an emphasis on the inter-related nature of these topics. Laboratory activities on campus will include charting and navigation, data synthesis and analysis while the coast field trip itself will represent the bulk of the lab experience. Field trip exercises will be conducted at various stops including oceanographic sampling and data collection. Lecture and laboratory will consider marine produced and influenced natural resources, their exploitation, and concepts centered about sustainable uses, especially as applied to field activities.

ESCI 17 EARTH SYSTEM SCIENCE - 3 Units (formerly PHSC 7)
Note: Required day field trips
Class Hours: 54 lecture total
Earth is a dynamic planet, changing in response to natural process within the atmosphere, geosphere, hydrosphere and biosphere. Modern science is now viewing the Earth system in its entirety, the sum of its parts, in an effort to understand how processes in one sphere impact those in another. This course stresses the inter-relationships of these systems and reviews natural cycles and positive and negative feedback pathways that operate over various time scales to affect global environmental change. The impact of civilization on the Earth system is also analyzed as the course considers pollution, over population, global warming, deforestation, desertification, resource depletion, and biologic extinctions along with solutions developed within sustainable concepts and practices.

ESCI 18 GLOBAL CLIMATE CHANGE: PAST, PRESENT AND FUTURE 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Atmospheric processes, on a global and local scale, are considered as they determine weather and climate through time. Natural influences on the atmosphere include the global ocean, the sun, and volcanisms on planet Earth, each directing atmospheric responses in a different manner. Past climate conditions on Earth, and the science used to determine those conditions through rock, sediment and ice cores, will be explored. Human influences on the atmosphere will be considered as well as a review of the observations that have lead to scientific consensus on global climate change. Current trends in climate change will be extrapolated into the future as directed by climate modeling and their consequences considered. This course may be offered in a distance education format.

ESCI 23 INTRODUCTION TO GEOLOGY IN THE FIELD - 2 Units (formerly GEOL 13, 13AB)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12 and a grade of C or higher in ESCI 2
Note: Includes required day field trips.
Class Hours: 27 lecture/27 lab total
An introduction to methods used to collect and interpret geologic data. Lecture sessions will provide theory and background for field excursions as well as compilation periods to devise interpretations, assemble geologic summary reports, graphics, and maps. Emphasis will be placed on field equipment and its use, outcrop examination and interpretation, rock and mineral identification, utilization of topographic maps, utilization and construction of geologic maps and cross sections, construction of stratigraphic columns, utilization of aerial and satellite imagery, recognition and interpretation of geologic structures, and recognition and interpretation of primary and secondary features in outcrops and different rock types. Two or more field sites will provide the focus of the course.

## ESCI 26 GEOLOGY OF THE NORTH COAST RANGES - 2 Units (formerly GEOL 26, 26AB)

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12
Note: Includes two required overnight field trips.
Class Hours: 27 lecture/27 lab total
The North Coast Ranges geomorphic province represents a zone of active mountain building and the most recently added material to the North American Continent. The province will be explored through lecture topics and field excursions that will relate active tectonics, accretion, and mountain building to the rocks now exposed in the North Coast Ranges. Coastal exposures will demonstrate the tectonics processes that are actively shaping this province and have done so for over 100 million years. Structural, lithologic, economic, and geomorphologic aspects of the province, as well as geologic hazards are also investigated.

## ESCI 27 GEOLOGY OF THE KLAMATH MOUNTAINS - 2 Units (formerly GEOL 27, 27A)

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12
Note: Two overnight field trips are required
Class Hours: 27 lecture/27 lab total
The diverse and complex geologic history of the Klamath Mountains geomorphic province will be explored through lecture topics and field excursions. Plate tectonics and mechanisms of continental growth will provide the conceptual background needed to frame the assembly of varied tectonostratigraphic terrains which represent this province. Structural, magmatic, lithologic, economic, and geomorphologic aspects of the province, as well as geologic hazards are also investigated.

## ESCI 32 GEOLOGY OF THE NORTHERN SIERRAS - 1.5 Units (formerly GEOL 32)

Grading: Pass/No Pass Option
Note: Required field trip.
Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)
An introduction to the geologic processes that have shaped the northern Sierras into a geologically diverse setting. The course will culminate with a three-day field trip through the northern Sierras. Lecture meetings will present basic concepts in geology as well as topics specific to the northern Sierras such as continental growth, multiple mountain building and landscape development, glaciation and related geomorphology, and "mother-lode" economic geology. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

## ESCI 33 GEOLOGY OF THE SACRAMENTO VALLEY - 1.5 Units (formerly GEOL 33, 27B)

Grading: Pass/No Pass Option
Note: Required overnight field trip.
Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)
An introduction to the geology of the Sacramento Valley that will culminate with a two-and-a-half day overnight field trip through this geomorphic province. Lecture meetings will present basic concepts in geology needed to understand the geologic history of the Sacramento Valley as well as outcrops visited during the field trip. Topics to be discussed include geologic hazards, economic resources, volcanism, faulting, river processes, and the Pleistocene geology of the valley. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

ESCI 34 GEOLOGY OF THE MODOC PLATEAU - 1.5 Units

## (formerly GEOL 34, 61AB)

Grading: Pass/No Pass Option
Note: Required overnight field trip.
Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)
An introduction to the geology of the Modoc Plateau which will culminate with a two-and-a-half-day overnight field trip through this geomorphic province. Lecture meetings will present basic concepts in geology needed to understand the geologic history of the Modoc Plateau as well as outcrops visited during the field trip. Topics to be discussed include volcanic processes and features, geologic hazards, geothermal potential, economic resources, faulting, plateau development, basin and range development, and surface and subsurface water. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

## ESCI 35 GEOLOGY OF LASSEN VOLCANIC PARK - 1.5 Units

(formerly GEOL 35, 62AB)
Grading: Pass/No Pass Option
Note: Required overnight field trip.
Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)
An introduction to the geology of Lassen Volcanic Park that will culminate with a two-and-a-half day overnight field trip within and around the park. Lecture meetings will present basic concepts in geology needed to understand the geologic history of the park as well as outcrops visited during the field trip. Topics to be discussed include volcanic processes and features, volcanic and geothermal hazards, geothermal potential, glaciation and faulting. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

## ESCI 36 GEOLOGY OF MOUNT SHASTA AND VICINITY - 1.5 Units (formerly GEOL 36, 64AB)

Grading: Pass/No Pass Option
Note: Required overnight field trip.
Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)
An introduction to the geology of Mount Shasta and surrounding areas which will culminate with a two-and-a-half day overnight field trip to and around the mountain. Lecture meetings will present basic concepts in geology needed to understand the geologic history of Mount Shasta as well as outcrops visited during the field trip. Topics to be discussed include volcanic processes and features, volcanic hazards, earthquakes, eruption predictability, geothermal activity, glaciation and mass wasting events. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

ESCI 37 GEOLOGY OF THE NORTHERN CALIFORNIA COAST - 1.5 Units (formerly GEOL 37)
Grading: Pass/No Pass Option
Note: Required overnight field trip.
Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)
An introduction to the geologic processes which have shaped and continue to shape northern California's coastline. The course will culminate with a two-and-a-half day overnight field trip along the coast. Lecture meetings will present basic concepts in geology as well as topics specific to northern California's coastline such as geologic hazards including earthquakes, tsunamis, mass wasting events, and shore erosion, tidal processes, erosion and depositional processes, active mountain building, and geomorphology. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

ESCI 38 GEOLOGY OF POINT REYES NATIONAL SEASHORE - 1.5 Units (formerly GEOL 38)
(Grading: Pass/No Pass Option
Note: Required overnight field trip.
Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)
An introduction to the geologic processes which have shaped and continue to shape the Point Reyes National Seashore. The course will culminate with a three day overnight field trip to the national seashore. Lecture meetings will present basic concepts in geology as well as topics specific to Point Reyes such as the San Andreas Fault system, geologic hazards including earthquakes, tsunamis, and mass wasting events, tidal and estuarine processes, and the area geomorphology. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

## ESCI 42 GEOLOGY OF THE REDDING AREA - 1 Unit (formerly GEOL 42, 100)

Grading: Pass/No Pass Option
Note: Two required day field trips.
Class Hours: 9 lecture/27 lab total (when offered in a Distance Education format, hours will total 27 for the lecture portion of the class and an additional 27 hours of lab totaling 54 hours for this course.)
This introductory, short-term field class that will introduce the student to geologic features in the Redding area. Included in the lecture meetings is a basic introduction to geology and the concepts necessary to appreciate the geologic history recorded in the rocks near town. Mining aspects will also be introduced. Field trip activities will explore rock relationships and visit points of interest and significance around the Redding area over two 8 -hour outings. The lecture portion of this course may be offered in a distance education format.

## ESCI 43 GEOLOGY OF THE SHASTA LAKE AREA - 1 Unit (formerly GEOL 43, 102)

Grading: Pass/No Pass Option
Note: Two required day field trips
Class Hours: 9 lecture/27 lab total (when offered in a Distance Education format, hours will total 27 for the lecture portion of the class and an additional 27 hours of lab totaling 54 hours for this course.)
This course is an introductory, short-term field class that will introduce the student to geologic features in the Shasta Lake area including those that are associated with Shasta Dam and the Sacramento River. Included in the lecture meetings is a basic introduction to geology and discussions related to damming the Sacramento River including engineering and ecosystem considerations. The geologic history of record in the area will be demonstrated though rock features such as fossil content. Field trips activities will explore rock relationships, river, lake and relationships and other points of significance during two 8 -hour outings. The lecture portion of this course may be offered in a distance education format.

## ESCI 44 GEOLOGY OF THE WHISKEYTOWN AREA - 1 Unit (formerly GEOL 44)

Grading: Pass/No Pass Option
Note: Two required day field trips
Class Hours: 9 lecture/27 lab total (when offered in a Distance Education format, hours will total 27 for the lecture portion of the class and an additional 27 hours of lab totaling 54 hours for this course.)
The geologic history recorded in the Whiskeytown National Recreation area will be discussed with an introduction to relevant geologic concepts, accompanied by onsite explorations to demonstrate those concepts. Accretion, shear zone dynamics, magma chamber evolution and emplacement and the economic geology of the area are among the topics to be explored. The field trip will emphasize theory with field application as we visit points of interest and significance during two 8-hour outings. The lecture portion of this course may be offered in a distance education format.

## ESCI 45 GEOLOGY OF CASTLE CRAGS AND VICINITY - 1 Unit

 (formerly GEOL 45)Grading: Pass/No Pass Option
Note: Two required day field trips.
Class Hours: 9 lecture/27 lab total (when offered in a Distance Education format, hours will total 27 for the lecture portion of the class and an additional 27 hours of lab totaling 54 hours for this course.)
Castle Crags and the upper Sacramento River will provide the backdrop for an introduction to the geologic history and processes which have shaped this area. Lecture meetings will present relevant geologic concepts while on-site explorations will demonstrate those concepts. Topics will include glaciation, river dynamics, sea floor accretion, magma chamber evolution and emplacement and ancient environments. The field trip will emphasize theory with field application as we visit points of interest and significance during two 8 -hour outings. The lecture portion of this course may be offered in a distance education format.

## ESCI 46 GEOLOGY OF BURNEY FALLS AND VICINITY - 1 Unit <br> (formerly GEOL 46)

## Grading: Pass/No Pass Option

Note: Two required day field trips.
Class Hours: 9 lecture/27 lab total (when offered in a Distance Education format, hours will total 27 for the lecture portion of the class and an additional 27 hours of lab totaling 54 hours for this course.)
As a part of the southern Cascades and southern Modoc Plateau, the Burney Falls area presents an excellent backdrop for considering the evolution of volcanic mountain chains. In addition, water resources are among the most impressive in the country as springs in the area emit millions of gallons of water daily. Lecture meetings will focus on relevant concepts while on-site explorations will allow for the synthesis of those concepts with on-site observations. Volcanology, surface and subsurface hydrogeology including erosive forces as displayed by Burney Falls, and ancient environments such as vast ancient lake deposits, represent some of the topics explored in this course. The field trip will emphasize theory with field application as we visit points of interest and significance during two 8-hour outings. The lecture portion of this course may be offered in a distance education format.

ESCI 97 SPECIAL TOPICS IN EARTH SCIENCE - .5-2 Units (formerly GEOL 97)
Note: Required field trips.
Class Hours: 9-36 lecture total
This course will provide students with a focused topic in the expanding fields of the geosciences. The topics chosen will be characterized by recent advances in the field and/or by multi-disciplinary approaches to traditional subjects. Topics will vary with each course offering and will be listed in the schedule of classes. Since the subject matter of this course varies with each offering, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ESCI 98 SPECIAL LAB TOPICS IN EARTH SCIENCE - .5-1 Unit (formerly GEOL 98)

Note: Required field activities.
Class Hours: 27-54 lecture total
This course will provide students with an introduction to recent technological advances or multidisciplinary approaches to laboratory and field techniques in the geosciences. Topics will vary with each course offering and will be listed in the schedule of classes. Since the subject matter of this course varies with each offering, this course is repeatable three times for a total of four enrollments.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ECONOMICS (ECON)

ECON 1A PRINCIPLES OF ECONOMICS (MICRO) - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher (ECON 1A is not a prerequisite for ECON 1B)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is a study of the basic institutions and principles of microeconomics and so it concentrates on the parts of an economic system; the markets, the producers, the consumers and the structures of basic industries along with systems for relative resource use and income determination. This course may be offered in a distance education format.

ECON 1B PRINCIPLES OF ECONOMICS (MACRO) - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher (ECON 1A is not a prerequisite for ECON 1B)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course studies the basic economic institutions and principles as they pertain to the entire economic system such as money and banking, determinants of national income, employment, output and the roles played by government in using monetary and fiscal policy to promote the mandates of the Employment Act of 1946. This course may be offered in a distance education format.

## EDUCATION (EDUC)

## EDUC 1 INTRODUCTION TO EDUCATION AND TEACHING - 3 Units

Class Hours: 54 lecture total
For prospective teachers, paraprofessionals, tutors, classroom volunteers/mentors, and others interested in education, this introductory course focuses on contemporary education practices and theories. Topics include: educational history, organization, teacher-child relationships, teaching methods, school resources, staff relations, curriculum patterns, authority, and discipline in the schools.

## EDUC 2 LITERACY AND LEARNING - 3 Units

Class Hours: 54 lecture total
This course serves as a theoretical framework for prospective teachers, paraprofessionals, and continuing professional development regarding how humans acquire language and literacy skills from childhood through adulthood. It provides practical information for developing language and literacy in a pluralistic multicultural society, which will enhance first and second language and cognitive development. This course is useful preparation for CLAD credential requirements.

## EDUC 10 LAWS AND SERVICES FOR SPECIAL EDUCATION - 3 Units

Class Hours: 54 lecture total
This course is designed to prepare prospective teachers, paraprofessionals, tutors, classroom volunteers/mentors, and others interested in education to work effectively with students identified as having special education needs. The course will cover the 13 handicapping conditions, how students qualify for special education services, and the laws and regulations that govern special education practices.

EDUC 94 EDUCATION WORKSITE LEARNING -.5-8 Units
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

EDUC 97 SPECIAL TOPICS IN EDUCATION - .5-3 Units
Grading: Pass/No Pass Option
Class Hours: 9-54 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

EDUC 197 SPECIAL TOPICS IN EDUCATION - .5-2 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## EDUCATION - TEACHER EDUCATION (EDTE)

EDTE 51 CLASSROOM EXPERIENCE I - READING - 1 Unit (form. EDTE 55) Corequisite: Students must be concurrently enrolled in EDUC 94 Class Hours: 18 lecture total
EDTE 51 is an introduction to the teaching profession designed for students wishing to obtain a multiple subject teaching credential. Classroom instruction is aligned with fieldwork so that prospective teachers acquire planned structured observations and experiences in K-8 classrooms that demonstrate exemplary practice as described in the California Standards for the Teaching Profession. The class provides an overview of various important aspects of the teaching profession, including current issues and legislation in education, state requirements for teacher certification, elementary school curriculum, student diversity, factors which affect learning, and effective classroom procedures and routines. Discussion sessions assist prospective teachers in making connections between college courses and instruction in elementary public schools. Emphasis is upon application in the content areas of reading and language.

EDTE 52 CLASSROOM EXPERIENCE II - READING - 1 Unit (form. EDTE 60) Corequisite: Students must be concurrently enrolled in EDUC 94 Class Hours: 18 lecture total
EDTE 52 is designed to deepen awareness and knowledge regarding specific important aspects of the teaching profession, including in-depth examination of curriculum and assessment requirements specified in recent legislation, specific tests required for teacher certification, student teaching, specific education and content standards, lesson planning, and effective instructional strategies to promote learning. Classroom instruction is aligned with fieldwork so that prospective teachers acquire planned structured observations and experiences in K-8 classrooms that demonstrate exemplary practice as described in the California Standards for the Teaching Profession. Discussion sessions assist prospective teachers in making connection between college courses and instruction in elementary schools. Emphasis is upon application in the content areas of reading and language.

EDTE 61 MATH I CLASSROOM EXPERIENCE - 1 Unit (formerly EDTE 65) Corequisite: Students must be concurrently enrolled in EDUC 94
Class Hours: 18 lecture total
EDTE 61 is designed to deepen awareness and knowledge about the role, function, and responsibilities of the teacher in today's public school setting. Prospective teachers learn theories related to child development, as well as various age-level cognitive, physical, emotional and social characteristics which impact learning. Prospective teachers gain knowledge and practice regarding tests required for teacher certification, including the CSET and RICA. Classroom instruction is aligned with fieldwork so that prospective teachers acquire planned structured observations and experiences in K-8 classrooms that demonstrate exemplary
practice as described in the California Standards for the Teaching Profession. Discussion sessions assist prospective teachers in making connections between college courses and instruction in elementary schools. Emphasis is upon application in the content area of math.

EDTE 62 MATH II CLASSROOM EXPERIENCE - 1 Unit (formerly EDTE 70)
Corequisite: Students must be concurrently enrolled in EDUC 94
Class Hours: 18 lecture total
EDTE 62 is designed to deepen awareness and knowledge about each of the six California Standards for the Teaching Profession, including topics addressed within the standards and ways in which the standards drive and support effective instructional practices. The class promotes understanding about math content standards and developmentally appropriate strategies to teach math at various grade levels. Prospective teachers learn about effective instructional practices for diverse student populations, including English language learners, students with various types of disabilities, and students with specials needs associated with economics and culture. Classroom instruction is aligned with fieldwork so that prospective teachers acquire planned structured observations and experiences in K8 classrooms that demonstrate exemplary practice as described in the California Standards for the Teaching Profession. Discussion sessions assist prospective teachers in making connections between college courses and instruction in elementary schools. Emphasis is upon application in the content area of math.

EDTE 71 INTERNSHIP IN SCIENCE TEACHING - LIFE SCIENCE - . 5 Unit Class Hours: 27 lab total
EDTE 71 is focused on current teaching methods for life science. It is designed to give students the opportunity to work with elementary and middle school students in a science teaching/learning environment in the hands-on Science Education Laboratory facility on campus. The hands-on lessons provide early teaching experience in science for undergraduates exploring teaching as a career. All lessons are based on the California content standards in science. Students cover instructional strategies as well as content as part of the two-hour teaching and onehour follow-up laboratory experience.

## EDTE 72 INTERNSHIP IN SCIENCE TEACHING - PHYSICAL SCIENCE . 5 Unit

Class Hours: 27 lab total
EDTE 72 is focused on current teaching methods in physical science. It is designed to give students the opportunity to work with elementary and middle school students in a science teaching/learning environment in the hands-on Science Education Laboratory facility on campus. The hands-on lessons provide early teaching experience in science for undergraduates exploring teaching as a career. All lessons are based on the California content standards in science. Students cover instructional strategies as well as content as part of the two-hour teaching and onehour follow-up laboratory experience.

EDTE 73 INTERNSHIP IN SCIENCE TEACHING - EARTH SCIENCE . 5 Unit
Class Hours: 27 lab total
EDTE 73 is focused on current teaching methods for earth science. It is designed to give students the opportunity to work with elementary and middle school students in a science teaching/learning environment in the hands-on Science Education Laboratory facility on campus. The hands-on lessons provide early teaching experience in science for undergraduates exploring teaching as a career. All lessons are based on the California content standards in science. Students cover instructional strategies as well as content as part of the two-hour teaching and onehour follow-up laboratory experience.

## ENERGY (ENER)

## ENER 50 RENEWABLE ENERGY AND SUSTAINABLE DEVELOPMENT -

 2 UnitsGrading: Pass/No Pass Option
Class Hours: 36 lecture
This course introduces students to the field of sustainable development and renewable energy. Participants will receive instruction in sustainable development theory and history, and sustainable development applications such as renewable energy solutions, sustainable building, and sustainable development planning. This course also introduces current developments in national and international development efforts.

## ENER 101 PHOTOVOLTAIC TECHNOLOGY I-3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ELEC 138
Class Hours: 36 lecture/54 lab
This course introduces students to the field of photovoltaics. Participants will receive instruction in solar electrical theory and history, photovoltaic safety, related vocabulary and terminology, photovoltaic components and function, and types of photovoltaic systems. This course also introduces current developments in the photovoltaic industry including net metering laws, rebates, tax incentives, and its relationship to federal and state economic stimulus packages.

ENER 102 PHOTOVOLTAIC TECHNOLOGY II - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENER 101
Class Hours: 36 lecture/54 lab
This course introduces students to the components of photovoltaic hardware and systems; photovoltaic system sizing and costing; site and grid electrical integration; system permitting and inspection; and system commissioning, maintenance, and troubleshooting.

ENER 151 WIND-GENERATION TECHNOLOGY I-3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ELEC 138
Class Hours: 36 lecture/54 lab
This course introduces students to concepts and terminology for how wind energy is captured and transformed into electrical power. Discussion includes energy concepts, wind turbine components and operation.

ENER 152 WIND-GENERATION TECHNOLOGY II - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENER 151
Class Hours: 36 lecture/54 lab
This course focuses on turbine energy output, issues in connecting to the power grid, methods used to conduct site assessments for the development of wind farms, and the economics of purchasing and installing both small and utility scale wind turbines.

## ENGINEERING (ENGR)

ENGR 1A MEASUREMENTS AND PLANE SURVEYING - 3 Units
Prerequisite: A grade of C or higher in MATH 10 or Math Placement Level 5 or higher
Class Hours: 36 lecture/54 lab total
Surveying fundamentals including the use and care of surveying instruments such as engineers' level, transits, and theodolite. Applications include survey procedures, vertical and horizontal measurements, traverses, layout, and survey calculations. Additional topics include legal descriptions, public land surveying, advanced equipment, and GPS.

## ENGR 1B PLANE SURVEYING - 3 Units

Prerequisite: A grade of C or higher in MATH 10 or Math Placement Level 5 or higher, and a grade of $C$ or higher in ENGR 1A
Class Hours: 36 lecture/54 lab total
Application of plane surveying principles to control surveys, field astronomy, route and construction surveys and property surveys. Introduction to advanced survey equipment and related systems.

## ENGR 2 CAREER PLANNING FOR ENGINEERING \& ENGINEERING TECHNOLOGY - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total
Career opportunities and training requirements in the fields of engineering and engineering technology will be examined. Students will be assisted in developing career and educational goals. Emphasis will also be placed upon developing basic employment skills and resume writing. Student activities will develop teamwork and organizational skills appropriate to technology. The course is required of all engineering and engineering technology (electronics and drafting) majors.

ENGR 17 CIRCUITS AND DEVICES - Units
Prerequisite: A grade of C or higher in MATH 4A, and a grade of $C$ or higher in PHYS 4B
Corequisite: Students must be concurrently enrolled in, or have completed MATH 4 B with a grade of C or higher
Class Hours: 54 lecture/54 lab total
This course covers Nodal and Mesh circuit analysis techniques, first and second order steady state and transient analysis using the methods of differential calculus, phasors, resonance, RLC circuits, the j operator, operational amplifiers, duality, basic digital circuits and Karnough mapping.

ENGR 20 RESIDENTIAL DESIGN - 2 Units (formerly ENGR 21A)
Corequisite: Students must be concurrently enrolled in, or have completed ENGR 29 with a grade of C or higher.
Class Hours: 18 lecture/54 lab total
This is a course in the study of residential design, including nontraditional structures and their application to single family dwellings. Course topics include costs, architectural styling, site consideration, room design and orientation, and preliminary drawings. The student designs one dwelling and develops the preliminary drawings in basic CAD for completion in the succeeding course, ENGR 21.

ENGR 21 ARCHITECTURAL DRAWING (formerly ENGR 21B) - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in both ENGR 20 and ENGR 29
Class Hours: 36 lecture/54 lab total
The student develops a basic set of architectural drawings of a residence from preliminary drawings designed during ENGR 20 and approved by the instructor. This course teaches architectural specific CAD design software, including both 2D and 3D concepts as they relate to floor plans, elevations, foundations, roofs, and electrical plans.

## ENGR 22 ENGINEERING GRAPHICS - 2 Units

Prerequisite: A grade of C or higher in ENGL 270, or English Placement Level 4 or higher; and a grade of C or higher in MATH 220 or Math Placement Level 1 or higher
Class Hours: 18 lecture/54 lab total
This course teaches the theory of orthographic projections and its use in delineating three-dimensional objects. The course begins with the basics. Topics include lettering, types of lines, geometric constructions, basic dimensioning practices, auxiliary views and a brief introduction to Computer-Aided Drafting (CAD).

ENGR 24 DESCRIPTIVE GEOMETRY - 2 Units
Prerequisite: A grade of C or higher in ENGR 22
Class Hours: 18 lecture/54 lab total
This course is a continuation of study of the theory of engineering graphics and its use in solving three-dimensional problems through the application of principals of multi-view projections. Descriptive Geometry topics include the use of auxiliary views in finding true length, bearing and slope of lines, the true shape and edge view of surfaces, dihedral angles, shortest connectors, and the intersection between planes. Additionally, the method of revolutions is also explored in solving similar problems.

ENGR 25 STRUCTURAL DRAFTING - 3 Units
Prerequisite: A grade of C or higher in each of the following courses: ENGR 22, ENGR 29, and ENGR 38
Class Hours: 36 lecture/54 lab total
This is a course in advanced drafting, focusing on structural drafting, in order to prepare drafters for industry. Topics include reference and standards research, graphic and mathematical analysis, and engineering notes. Emphasis is on structural steel design and detailing plus reinforced concrete detailing.

ENGR 26 INDUSTRIAL DRAFTING - 4 Units
Prerequisite: A grade of $C$ or higher in ENGR 22 and a grade of $C$ or higher in ENGR 29
Class Hours: 36 lecture/108 lab total
The advanced study and application of industrial design and drafting strategies, techniques, and standards. Prepares the drafting technician for employment in industry. Includes advanced topics in tooling jigs and fixtures, welding, graphic layout, piping, fasteners, reference data, casting design, gears and bearings, precision geometric dimensioning and tolerancing, and American Society of Mechanical Engineers (ASME) and ANSI drafting standards, document management, and checking procedures. Both manual and CAD techniques and strategies are covered. The course places emphasis on group organization and team work.

ENGR 27 MAP \& COMPUTER-AIDED DRAFTING - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGR 29
Advisory: A grade of C or higher in ENGR 1A
Class Hours: 36 lecture/54 lab total
This course teaches the use of the computer and civil design software to produce maps. Course topics include input and processing of field data, digital terrain modeling, contours, subdivisions, roads, and deed descriptions.

## ENGR 29 COMPUTER-AIDED DRAFTING (CAD) - 2 Units

Grading: Pass/No Pass Option
Corequisite: Students must be concurrently enrolled in, or have completed ENGR 22 with a grade of C or higher
Note: Students taking the Internet format of this course must have access to and working knowledge of the Internet and Windows, plus access to the most recent version of the basic AutoCAD software.
Class Hours: 18 lecture/54 lab total (when offered in the Distance Education format, hours will total 108)
This course utilizes basic AutoCAD as a tool for efficient drafting and design development. This course helps prepare students for the growing numbers of jobs that require CAD, both for its greater efficiency and for its computer database drawings. The emphasis is on graphics with engineering applications. This course may be offered in a distance education format.

ENGR 30 INTERMEDIATE COMPUTER-AIDED DRAFTING - 2 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGR 29
Class Hours: 18 lecture/54 lab total
This is an intermediate course using AutoCAD for drafting and design. This course builds on basic 2D CAD, develops management systems, and covers 3D CAD through solid modeling.

ENGR 31 ARCHITECTURAL DETAILING - 2 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGR 21
Class Hours: 18 lecture/54 lab total
This is a continued study of CAD as it pertains to architectural applications. The student completes the set of architectural drawings designed from the previous courses. The emphasis is in detailing sections, interior elevations, structural calculations, electrical loading, and building code compliance. The techniques for presentation renderings and commercial design considerations will also be discussed.

ENGR 32 ADVANCED CIVIL DESIGN APPLICATIONS FOR CAD - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in both ENGR 27 and ENGR 1A
Class Hours: 36 lecture/54 lab total
This course will further the student's knowledge obtained in ENGR 27, so that the student will be better prepared as an engineering/drafting technician in a civil engineering office. Course topics include use of the computer and currently available software to process surveying data into complex topographic maps. These maps can and will be used for planimetric and profile maps as well as to process complex earthwork calculations.

## ENGR 33 SOLID MODELING COMPUTER-AIDED DRAFTING - 2 Units

 (formerly ENGR 30C)Prerequisite: A grade of C or higher in ENGR 29
Class Hours: 18 lecture/54 lab total
An advanced computer-aided drafting course using Solid Works, Mechanical Desktop and/or Inventor software to prepare students for drafting positions with high potential to advance to designer, etc. ENGR 33 builds on the skills and knowledge of ENGR 29. This course will focus on how to create 3D models, assemble and constrain assembly models. Students will use advanced drafting skills to solve design problems and to present solutions for production or engineering processes, and to visually communicate their solution.

## ENGR 35 STATICS - 3 Units

Prerequisite: A grade of $C$ or higher in PHYS 4A
Corequisite: Students must be concurrently enrolled in, or have completed MATH 4A with a grade of $C$ or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher. Previous drafting experience is helpful.
Class Hours: 54 lecture total
A course in the study of the mechanics of equilibrium of force systems acting on engineering structures. Topics include equivalent force couple systems, equilibrium, truss analysis, multi-force member analysis, centroids, distributed forces, beam stress and strain diagrams, friction, cables, moments and products of inertia, and virtual work. This course is usually followed by a course in dynamics, offered at the university upper-division level.

## ENGR 37 STATICS FOR ENGINEERING TECHNICIANS AND

 CONSTRUCTION MANAGEMENT - 3 UnitsPrerequisite: A grade of C or higher in MATH 10, or Math Placement Level 5 or higher
Class Hours: 54 lecture total
This course analyzes the external forces induced in structures and machines by various types of loading. Basic vector analysis is used to determine equivalent force-couple systems and equilibrium of two-dimensional bodies. Analysis of simple frames and machines and trusses is discussed. Frictional forces within wedges and belts are considered within units. Centroids and Area Moments of Inertia are calculated for composite objects.

## ENGR 38 STRENGTH OF MATERIALS FOR ENGINEERING TECHNICIANS AND CONSTRUCTION MANAGEMENT - 3 Units

Prerequisite: A grade of $C$ or higher in ENGR 37 or a grade of $C$ or higher in ENGR 35
Class Hours: 54 lecture total
This course analyzes the internal forces induced in structures and machines by various types of loading. Simple stresses, strains, basic mechanical properties of materials, torsion of circular shafts, shear forces and bending moments in beams, stresses in beams and beam design will be covered. Topics in deflection of beams and statically indeterminate beams are covered.

ENGR 45 PROPERTIES OF MATERIALS - 3 Units
Prerequisite: A grade of C or higher in PHYS 4A
Class Hours: 36 lecture/ 54 lab total
Study of atomic and crystal structures of metallic materials and their physical, mechanical and chemical properties, and the application of basic principles to the selection and use of engineering materials.

ENGR 64 ENGINEERING MATERIAL TESTING - 3 Units
Prerequisite: A grade of C or higher in ENGL 270 or English Placement Level 4 or higher, and a grade of $C$ or higher in MATH 220 or Math Placement Level 1 or higher Class Hours: 36 lecture/54 lab total
This course will provide the basic understanding and experience in testing civil engineering/construction materials. Various types of test equipment and testing procedures will be covered as well as the computations associated with the individual tests.

## ENGR 94 ENGINEERING WORKSITE LEARNING - 1-8 Units

Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ENGR 97 SPECIAL TOPICS IN ENGINEERING - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in engineering. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Since subject matter varies each time the course is taught, this course is repeatable 3 times for a total of 4 enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ENGR 98 SPECIAL LAB TOPICS IN ENGIN. - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in engineering. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ENGR 118 BLUEPRINT AND SPECIFICATION READING (MECHANICAL) 2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
A beginning blueprint reading class for the student in the metal and mechanical trades. Basic visualization and drawing concepts, including orthographic projection, detailing, sketching and communication skills that are needed for employment, are developed in the class.

## ENGR 119 BLUEPRINT AND SPECIFICATION READING (ARCHITECTURAL) 2 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture total
Designed to provide the student who expects to enter a skilled trade with a working knowledge of architectural and construction drawings and specifications and basic communication skills that will be needed for employment.

ENGR 197 SPECIAL TOPICS IN ENGINEERING - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of engineering. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for engineering majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ENGR 198 SPECIAL LAB TOPICS IN ENGIN. - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of engineering. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for engineering majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ENGLISH (ENGL)
Please note Assessment Testing Policy. English assessment testing is required for entry into the following courses: Basic Skills English classes and ENGL 1A. The College administration will establish test dates in advance of registration each semester. Contact the Assessment Office for information on testing dates. If you think for some reason that your assessment test score does not reflect your English competency, please make an appointment with a counselor to discuss your options.

ENGL 1A COLLEGE COMPOSITION - 4 Units
Prerequisite: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of $C$ or higher in ESL 138
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
This course develops the reading, critical thinking, and writing skills necessary for academic success, emphasizing expository and argumentative writing as well as research and documentation skills. As a transferable course, it presupposes that students already have a substantial grasp of grammar, syntax, and organization, and that their writing is reasonably free from errors. A research paper is required for successful completion of this course. This course may be offered in a distance education format.

ENGL 1B LITERATURE AND COMPOSITION - 3 Units
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Course emphasizes the development of critical thinking and writing skills through close study of the major genres of literature: poetry, drama, short story and novel. Students receive further instruction and practice in analytical writing, developing arguments about literary works and the critical reception of those works. In discussion and writing, students will also examine arguments as such, learning to identify sound as well as fallacious reasoning in critical assessments of literature. This course may be offered in a distance education format.

ENGL 1C CRITICAL REASONING, READING, AND WRITING - 3 Units
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Course focuses on critical thinking skills, close textual analysis, and expository and argumentative writing. Students apply critical thinking skills in reading non-fiction and fiction, and in writing essays of definition, cause/effect analysis, argumentation, refutation, and advocacy. Students will learn to use research strategies in analyzing others' ideas and supporting their own. This course may be offered in a distance education format.

ENGL 10A WORLD LITERATURE (to 1500) - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course introduces students to some representative masterpieces in world literature beginning with the ancient world and continuing to 1500. A majority of the works will be selected from non-Western literary traditions. The course involves critical analysis of these works within the context of the culture and time in which they were written. Emphasis centers on identifying and analyzing important themes that shape and define the human experience. This course may be offered in a distance education format.

ENGL 10B WORLD LITERATURE (after 1500)-3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course introduces students to some representative masterpieces in world literature beginning with 1500 and continuing to the present. A majority of the works will be selected from non-Western literary traditions. The course involves critical analysis of these works within the context of the culture and time in which they were written. Emphasis centers on identifying and analyzing important themes that shape and define the human experience. ENGL 10A is not a prerequisite to ENGL 10B. This course may be offered in a distance education format.

ENGL 11A A SURVEY OF AMERICAN LITERATURE-Pre-Colonial to 1860 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The course involves a study of representative authors in the literary history of the United States from the pre-colonial period to the Civil War. This course may be offered in a distance education format.

ENGL 11B A SURVEY OF AMERICAN LITERATURE-1860 to Present - 3 Units Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course involves a study of representative authors in the literary history of the United States from the Civil War to the present day. This course may be offered in a distance education format.

ENGL 12 INTRODUCTION TO SHORT FICTION - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introduction to the genre of the short story in English and translation, including the elements of the form: structure, narration, point of view, setting, character, plot, and metaphorical language. This course may be offered in a distance education format.

ENGL 13A SURVEY OF ENGLISH LITERATURE (Old English Period through Neoclassicism) - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
ENGL 13A is the first semester of the basic two-semester English Literature survey course commonly offered in the sophomore year at colleges and universities. It involves the intensive study of and reading and writing upon representative masterpieces of the literary history of England from the Anglo-Saxon period to the end of the 18th century. This course may be offered in a distance education format.

ENGL 13B A SURVEY OF ENGLISH LITERATURE (from the Romantic Period to Present) - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
ENGL 13B is the second part of the basic two-semester English Literature survey course, commonly offered in the sophomore year at colleges and universities. It involves the intensive study of and reading and writing upon representative masterpieces of the literary history of England from the Romantic Period to the present. This course may be offered in a distance education format.

ENGL 14 A SURVEY OF DRAMA AS LITERATURE - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A course designed to provide the student with an awareness of the origin and development of Western drama through an examination of representative plays from classical Greece to the present. Aesthetic values as well as social, political, and psychological implications expressed through the drama will be examined in order to enhance the student's understanding and appreciation of dramatic literature; therefore, students will be required to watch as well as read plays which are representative of the various movements in western civilization. This course may be offered i a distance education format.

ENGL 15 INTRO. TO LITERATURE BY AND ABOUT WOMEN - 3 Units Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A survey of literature by and about women in different periods and countries. Genres studies include stories, diaries and letters, poetry and drama. Emphasis is on the human condition, especially among woman, as expressed in literature. This course may be offered in a distance education format.

## ENGL 16 POETRY - 3 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An intensive course analyzing the techniques and forms of poetry in English with stress on the genre. Interpretation and appreciation are the primary goals. Emphasis is on extensive reading for pleasure, various types of writing including analytical, responsive and experiential, as well as group experiences in listening. In addition, this course seeks to equip the college literature student to understand literary materials in a new way. The course includes a number of written exercises. This course may be offered in a distance education format.

ENGL 17 INTRODUCTION TO SHAKESPEARE - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course offers an introduction to the representative works by Shakespeare including the characteristics of the different genres such as comedy, history, and tragedy as well as a study of the sonnets. A particular focus on theatre history and the historical and sociological influences of the Elizabethan/Jacobean era will highlight the study of the dramatic and literary conventions. This course may be offered in a distance eduation format.

## ENGL 18 AFRICAN AMERICAN LITERATURE - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7 Class Hours: 54 lecture total
This course is primarily a genre study of African American Literature from the colonial period to the present - including oral tradition, poetry, slave narratives, essays, short stories, plays, novels, and music. Included is an examination of the historical, cultural and social forces influencing these works.

## ENGL 19 A SURVEY OF THE BIBLE AS LITERATURE - 3 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total
A course designed to provide the student with an understanding of the origin and development of the bible canon and its rendering into English. Major Bible books will be examined from the perspectives of content, form, and scholarly criticism. This course may be offered in a distance education format.

ENGL 20 WORLD MYTHOLOGY - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course introduces the major images and themes of myths from around the world. By analyzing various archetypal patterns found in the sacred stories, narratives, and legends of the great civilizations and tribal cultures, students understand both the uniqueness of each culture's world view and the commonality of human experience. This course may be offered in a distance education format.

ENGL 24 MULTICULTURAL PERSPECTIVES IN AMERICAN LITERATURE 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is an introduction to multiethnic literary currents in American literature and will focus on African-American, Asian-American, Hispanic-American, PacificIslander, and/or Native-American literature (minimum of two) within "mainstream" American literature. Poetry, essays, short stories, novels, memoirs, and biography will be studied as works of individual artists and from a cultural perspective. An integral part of the course is an understanding of the political/cultural/historical context of the literature. This course stresses critical and analytical thinking, reading, and writing skills. Students from all backgrounds should benefit from the unique insights into American life afforded by these rich and varied traditions. This course may be offered in a distance education format.

ENGL 25 LINGUISTICS - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The course is an introduction to the study of language. Course content surveys linguistic concepts of the nature and diversity of language: morphology, syntax, semantics, phonetics, and phonology; language acquisition; social variation, and historical change. This course may be offered in a distance education format.

## ENGL 31 CREATIVE WRITING - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or ESL 138, or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The student learns the craft and principles of dramatic narrative and poetry through a variety of short assignments. A final project may be written in any field of interest: short story, article, movie/TV script, stage play, or book. Analysis and lecture are presented both for those desiring to write experimentally, and for those interested in the demanding world of publication. This course may be offered in a distance education format.

ENGL 33 FICTION AND FILM - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An examination of fiction and film as literary art forms. Course emphasizes critical reading of literature and viewing of film, with comparative, expository, and argumentative writing about those works. Through in-depth analysis of examples from both literature and film, students will become familiar with the major literary conversations in fiction and film, and learn to appraise a work on the basis of literary merit. This course may be offered in a distance education format.

## ENGL 36 CHILDREN'S LITERATURE - 3 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides an overview of the origins and developments of children's literature and acquaints the student with different genres of literature written for and read by children. In addition to exploring ways of promoting children's development through literature, students will also learn how to approach children's literature from a critical and theoretical perspective. This course may be offered in a distance education format.

## ENGL 91 ADVANCED COMPOSITION - 3 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Advanced instruction and practice in effective writing, with intensive study of the established rhetorical principles. Emphasis is upon excellence in writing and the application of grammar to the improvement of writing. Intended primarily for students who are working toward an elementary teaching credential; meets state certification requirements for an advanced course in writing. This course may be offered in a distance education format.

## ENGL 97 SPECIAL TOPICS IN ENGLISH - .5-2 Units

Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics and concepts not necessarily covered in other English courses. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

ENGL 129 GRAMMAR REVIEW 1: CORRECT AND EFFECTIVE SENTENCES 1.5 Units

Grading: Pass/No Pass Option
Class Hours: 27 lecture total (when offered in the Distance Education format, hours will total 81)
Emphasizes structure, variety, effectiveness and style of the English sentence. Includes methods of proofreading, the rules of punctuation, and techniques of revision. Includes comparison with sentence structure of other languages such as Spanish. This course may be offered in a distance education format.

ENGL 190 READING AND WRITING II - 4 Units
Prerequisite: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
This course is designed to improve critical reading skills and to increase writing abilities so that students are able to read a text closely and produce organized, wellsupported, and generally smoothly written essays. The course places emphasis on writing both as a process and as a presentable product. In addition, the course introduces students to academic research and the use of source materials in writing. This course may be offered in a distance education format.

## ENGL 191 WRITING IN THE WORKPLACE: GRAMMAR IN CONTEXT AND

 BASIC ESSAY STRUCTURE - 2 UnitsPrerequisite: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 36 lecture total
ENGL 191 is designed as the first in a module series specifically for those students who desire direct applications of writing skills to the workplace environment with a special emphasis on basic essay structure and the correct and effective use of grammar and mechanics required in vocational fields. Emphasis will be on both correctness and the writing process. If passed with a grade of " $C$ " or higher, this course can be used in combination with ENGL 192, ENGL 193 and/or ENGL 194 (for a total of four units) to meet the A.A. General Education Requirement and admit a student into ENGL 1A. The flexible scheduling of this course and the module
approach allows students more freedom in choosing both their schedules and their curriculum.

ENGL 192 WRITING IN THE WORKPLACE: NARRATION - 1 Unit
Prerequisite: A grade of C or higher in ENGL 191
Class Hours: 18 lecture total
ENGL 192 is designed specifically for those students who have completed ENGL 191 and who desire direct applications of writing skills to the workplace environment with a special emphasis on narrative writing skills utilized in vocational fields. Emphasis will be on both correctness and the writing process. If passed with a grade of "C" or higher, this course can be used in combination with ENGL 191 and either ENGL 193 or ENGL 194 (for a total of four units) to meet the A.A. General Education Requirement and admit a student into ENGL 1A. The flexible scheduling of this course, along with its module approach, allows students more freedom in choosing both their schedules and their curriculum.

## ENGL 193 WRITING IN THE WORKPLACE: PROCESS AND REPORT

 WRITING - 1 UnitPrerequisite: A grade of C or higher in ENGL 191
Class Hours: 18 lecture total
ENGL 193 is designed specifically for those students who have completed ENGL 191 and who desire direct applications of writing skills to the workplace environment with a special emphasis on process and report writing skills utilized in vocational fields. Emphasis will be on both correctness and the writing process. If passed with a grade of "C" or higher, this course can be used in combination with ENGL 191 and either ENGL 192 or ENGL 194 (for a total of four units) to meet the A.A. General Education Requirement and admit a student into ENGL 1A. The flexible scheduling of this course, along with its module approach, allows students more freedom in choosing both their schedules and their curriculum.

ENGL 194 WRITING IN THE WORKPLACE: COMPARISON/ CONTRAST AND

## BASIC ARGUMENTATION - 1 Unit

Prerequisite: A grade of C or higher in ENGL 191
Class Hours: 18 lecture total
ENGL 194 is designed specifically for those students who have completed ENGL 191 and who desire direct applications of writing skills to the workplace environment with a special emphasis on comparison/contrast and argumentative writing skills utilized in vocational fields. Emphasis will be on both correctness and the writing process. If passed with a grade of "C" or higher, this course can be used in combination with ENGL 191 and either ENGL 192 or ENGL 193 (for a total of four units) to meet the A.A. General Education Requirement and admit a student into ENGL 1A. The flexible scheduling of this course, along with its module approach, allows students more freedom in choosing both their schedules and their curriculum.

## ENGL 260 ELEMENTS OF READING 260-4 Units

Prerequisite: English Placement Level 2 or higher
Class Hours: 72 lecture total
This course is constructed to help students enhance personal reading and workrelated language skills. Instruction will include word attack strategies, vocabulary development, word usage, study skills, sentence writing, paragraph writing, critical thinking opportunities, and interpretive comprehension. Materials at the sixth and seventh grade levels will be used. The student must be capable of working independently and in small groups.

ENGL 270 ELEMENTS OF READING 270-4 Units
Prerequisite: A grade of C or higher in ENGL 260 or English Placement Level 3 or higher
Class Hours: 72 lecture total
This course is intended to help vocational and transfer-oriented students to augment academic reading and writing ability to successfully complete college-level courses. Students will be evaluated in class to determine strong and weak skill areas. Instruction will focus on college-appropriate vocabulary development; writing cogent, clear, precise prose with correct usage including grammar and spelling; plus comprehension focused on in-depth analysis and abstract reasoning. Materials at the eighth and ninth grade levels will be used. The student must be capable of working independently and in small groups.

## ENGL 280 READING AND WRITING I-4 Units

Prerequisite: A grade of C or higher in ENGL 270, or English Placement Level 4 or higher
Class Hours: 72 lecture total (This course may offered as partial Internet and hours will total 54 lecture and 54 Internet)
This course builds towards college-level reading and writing skills. The reading component emphasizes such skills as previewing, locating main ideas and supporting evidence, and drawing sound inferences. The writing component consists primarily of narrative, reading responses, and summaries. The course aims to increase reading and writing fluency, with some attention to correctness and the ability to develop ideas in an organized fashion in various kinds of writing. Part of this course may be offered in a distance education format.

ENGL 348 ADULT LITERACY I - 0 Units
Class Hours: $54-108$ lab total
This course is designed to help students reading below the fourth grade level improve their reading skills. The course will provide one-on-one tutoring in basic reading skills including symbol, sound, and letter relationships; phonics; short and long vowel sounds; consonant blends; letter formation; basic capitalization and punctuation rules; reading for details; and sequencing. Students will use materials below the fourth grade level. Students must be capable of working independently and in small groups to complete the program. Enrollment in sequential courses is based on measurable progress.

ENGL 350 ADULT LITERACY II - 0 Units
Advisory: English Placement Level 1 or higher
Class Hours: 54-108 lab total
This course is designed to help students reading below the sixth grade level improve their reading skills and prepare them to enter the credit English course sequence. The course will provide one-on-one and small group instruction in basic reading skills including decoding, sight vocabulary, basic writing conventions, comprehension at the literal level, and improved fluency. Students will use materials at the fourth and fifth grade levels. The student must be capable of working independently and in small groups to complete the program.

## ENGL 382 READING AND WRITING WORKSHOP - 0 Units

Class Hours: 1-200 lab total
Students receive individualized tutoring to address problems they are having either in written expression or in reading.

## ENGLISH AS A SECOND LANGUAGE (ESL)

Información General Sobre Nuestros Programas
El Colegio de Shasta sirve a su comunidad con programas educativos y culturales que amplian las experiencias de los estudiantes, desarrollan sus habilidades potenciales y los capacitan para ser productivos y para truinfar en la sociedad. A todos los estudiantes se les ofrece entrada a nuestros programas y a las oportunidades. El Colegio aspira a satisfacer las necesidades individuales, a mantener las normas académicas apropiadas, a proteger la libertad académica y personal, y a promover oportunidades sin discriminación.
Para obtener prioridad de matrícula en el siguiente semestre, complete el formulario expresando sus deseos de matricularse. Con mucha anticipación se publica un catálogo que incluye todas las clases ofrecidas en cada semestre escolar. Hay consejeros en cada periodo de matriculación para ayudarle al alumno a planear su programa escolar.

El Programa de "ESL" (Inglés como Segunda Lengua) se les ofrece a los estudiantes extranjeros y a los residentes que no hablan inglés. Hay varios niveles de cursos en ESL. Los administradores y los profesores del programa le podrán ayudar a seleccionar los cursos más beneficiales para usted. Los cursos se ofrecen en las días y noches. Si desea más información visite la Oficina \#206 o el Aula \#210 llame al número 242-7711.

## ESL 136 ORAL COMMUNICATION FOR COLLEGE SUCCESS - 4 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ESL 236 or ESL Placement Level 7 or higher Class Hours: 72 lecture total
This is a course designed to assist non-native speakers of English to build both fluency and accuracy in their listening and speaking skills. Activities integrating listening, speaking and pronunciation provide relevant practice necessary for business and academics.

## ESL 137 COMPOSITION I-6 Units (P/NP Option)

Prerequisite: A grade of C or higher in ESL 236 or ESL Placement Level 7 or higher Class Hours: 90 lecture/54 lab total
This is an academic course for non-native speakers of English designed to develop writing fluency. Emphasis is on writing short compositions, developing processwriting skills and learning common methods of organization. This course includes an intensive review of English grammatical patterns. Development of these skills enhances students' fluency and proficiency in college-level writing.

## ESL 138 COMPOSITION II - 6 Units (P/NP Option)

Prerequisite: A grade of C or higher in ESL 137 or ESL Placement Level 8 or higher Class Hours: 90 lecture/54 lab total
This is the second of two academic ESL writing courses designed to develop college level writing skills. Emphasis is on writing longer compositions including expository, analytic and argumentative essays. The course will also cover sentence structure as well as advanced grammatical patterns as they relate to refining writing skills.

ESL 220 ORAL COMMUNICATION - 2 Units (formerly ENGL 220)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
Designed for the upper beginning to upper intermediate student of English as a Second Language. Major emphasis will be on refining and expanding the listening and speaking skills, aural-oral coping skills, and oral critical thinking and expression skills, which are necessary to function in routine social interactions, entry-level jobs, and/or further academic work.

ESL 234 INTERMEDIATE HIGH - 5 Units (formerly ENGL 234)
Grading: Pass/No Pass Option
Advisory: Successful completion of ESL 333, or ESL Placement Level 5 or higher Class Hours: 36 lecture/162 lab total
This course reviews and expands the intermediate language skills learned in the previous level. Students will develop the ability to communicate in oral and written English beyond the familiar. They will read authentic materials on everyday topics, identify the main ideas and draw conclusions, and write routine correspondence and brief compositions with increasing complexity.

## ESL 236 ADVANCED - 5 Units (formerly ENGL 236)

Grading: Pass/No Pass Option
Prerequisite: Successful completion of ESL 334, a grade of C or higher in ESL 234, or ESL Placement Level 6 or higher
Class Hours: 36 lecture/162 lab total
At this level, students develop the ability to understand and engage in extended conversations and discussions and communicate with increasing fluency and grammatical accuracy. This course stresses the language skills necessary for further academic study. Students read authentic materials beyond the familiar, develop academic vocabulary, and write paragraphs and short compositions.

## ESL 247 ENGLISH AS A SECOND LANGUAGE VOCATIONAL MATH - 1 Unit (formerly ENGL 247)

Grading: Pass/No Pass Only
Class Hours: 54 lab total
A course designed to help ESL students develop math skills needed for entry level employment. The course will provide one-on-one tutoring in basic vocational math skills including: basic computation of whole numbers and fractions, order of operations, decimals and percents; time lineal, weight and volume measurements (U.S. standard and metric), basic money skills graphs and calculator use. Based on individual assessments, programs of study will be written for each student. Delivery will be multi-sensory with direct teaching and self exploration. Independent work skills are necessary to complete the study program. No math credit will be given for this course.

ESL 249 ENGLISH AS A SECOND LANGUAGE READING LAB - 1 Unit (formerly ENGL 249)
Grading: Pass/No Pass Only
Class Hours: 54 lab total
A course designed to help students with problems related to second language acquisition to improve their reading, writing, spelling and vocabulary skills. The course will provide one-on-one tutoring in reading related skills including symbol/sound relationships, sight word and spelling, and understanding at the concrete level. Based on individual assessments, programs of study will be developed for each student. Delivery will be multi-sensory with direct teaching along with individual exploration. Independent work skills are necessary to complete the study program.

ESL 320 ORAL COMMUNICATION - 0 Units
Class Hours: 72 lab total
Designed for the upper beginning to upper intermediate student of English as a Second Language. Major emphasis will be on refining and expanding the listening and speaking skills, aural-oral coping skills, and oral critical thinking and expression skills, which are necessary to function in routing social interactions, entry-level jobs, and/or further academic work

## ESL 331 BEGINNING LOW - 0 Units

Class Hours: 180 lab total
This is a course designed for the absolute beginner with zero competency in English. Emphasis is on oral language skills and basic vocabulary related to daily living.

## ESL 332 BEGINNING HIGH - 0 Units

Advisory: Successful completion of ESL 331
Class Hours: 180 lab total
This course builds on the basic language skills from ESL 331. Language skills are expanded in communicative contexts. Emphasis is placed on development of "social English."

ESL 333 INTERMEDIATE LOW - 0 Units
Advisory: Successful completion of ESL 332 or ESL Placement Level 4 or higher Class Hours: 180 lab total
This course integrates intermediate language skills. Students at this level build the communicative ability to function in practical areas of daily life.

## ESL 334 INTERMEDIATE HIGH - 0 Units

Advisory: Successful completion of ESL 333 or ESL Placement Level 5 or higher Class Hours: 180 lab total
This course reviews and expands the intermediate language skills learned in the previous level. Students will develop the ability to communicate in oral and written English beyond the familiar. They will read authentic materials on everyday topics, identify the main ideas and draw conclusions, and write routine correspondence and brief compositions with increasing complexity.

ESL 336 ADVANCED - 0 Units
Advisory: Successful completion of ESL 334, a grade of C or higher in ESL 234, or ESL Placement Level 6 or higher
Class Hours: 180 lab total
At this level, students develop the ability to understand and engage in extended conversations and discussions and communicate with increasing fluency and grammatical accuracy. This course stresses the language skills necessary for further academic study. Students read authentic materials beyond the familiar, develop academic vocabulary, and write paragraphs and short compositions.

## ESL 378 AMERICAN CITIZENSHIP - 0 Units

Advisory: A grade of C or higher in ESL 234 or ESL Placement Level 4 or higher Class Hours: 90 lab total
This is a course designed to prepare prospective citizens for citizenship. Class activities will focus on U.S. history, government, basic geography and American culture and customs as it relates to the knowledge required to become an American citizen. While improving their English language skills, students will learn how to complete naturalization forms and prepare for the written and oral test for citizenship.

ESL 385 LITERACY - 0 Units (formerly ENGL 385)
Class Hours: 54-216 lab total
This course emphasizes aural-oral language skills and basic literacy.
ENVIRONMENTAL RESOURCES
See AG, AGMA, AGNR, AGPS and CONS for course listings

## FAMILY STUDIES AND SERVICES (FSS)

FSS 10 INTRODUCTION TO HUMAN SERVICES - 3 Units
Class Hours: 54 lecture total
This course is an introduction to the Human Services field of study. It provides information to students who are interested in careers in the fields of welfare, mental health, adult/child protective services, vocational rehabilitation, social services, employment and training, education, child care services, job development and others. Historical and theoretical perspectives of human services will be covered. The significance of social policy and prevention will be stressed throughout the course. Workplace attitudes, values, ethics and professionalism will also be covered.

FSS 12 STANDARDS AND PRACTICES IN HUMAN SERVICES - 3 Units Advisory: A grade of C or higher in FSS 10
Class Hours: 54 lecture total
This course explores the theoretical perspectives and professional standards involve din Human Services - with particular emphasis on Social Work Practices. Students will be introduced to the practices of engagement, assessment, intervention, documentation and conflict resolution while consistently integrating these with the systems framework and strengths perspective. Professional and personal ethics will be stressed throughout the course. Multicultural competence and policy development will also be covered.

## FSS 16 MARRIAGE AND FAMILY - 3 Units (formerly HEOC 16)

Class Hours: 54 lecture total
An introductory course to marriage and family. Topics studied include dating, courtship, marriage, family life, dual career marriages, divorce, single parenting, domestic violence and other contemporary issues.

## FSS 18 ADULTHOOD AND AGING - 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total
A study of the developmental changes that occur during early, middle and late adulthood, as well as the continuities that exist within individuals throughout this time span. The physical, cognitive and psychosocial domains will be explored with a particular emphasis upon patterns that lead to successful aging within the societal context.

FSS 25 NUTRITION - 3 Units (formerly HOEC 25)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A study of the science of food, the nutrients and other substances therein, their actions, interactions and balance in relation to health and disease. The class emphasizes the positive contributions of nutrition to life and health. This course may be offered in a distance education format.

## FSS 26 NUTRITION THROUGH THE LIFE SPAN - 3 Units (formerly HOEC 26) <br> Class Hours: 54 lecture total

A course emphasizing the basic principles of nutrition as they apply to different age groups throughout the life cycle. The special concerns and nutritional needs of pregnancy and lactation, infancy and the preschool years, childhood and adolescence, adulthood and aging will be addressed. The course will also emphasize meal planning for the various stages of life utilizing current dietary recommendations and the most current revisions of nutrition labels.

FSS 27 NUTRITION AND DISEASE - 2 Units
Prerequisite: A grade of C or higher in FSS 25
Note: Upon successful completion of the course (a grade of B or better), licensed nurses will receive 30 CE hours under BRN Provider \#396.
Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 108)
A comprehensive therapeutic study of the relationship between a patient, their diet and optimum health. Physiological conditions that necessitate dietary modifications in the clinical setting will be stressed. This course may be offered in a distance education format.

## FSS 46 PERSONAL FINANCE - 3 Units (formerly HOEC 46)

Class Hours: 54 lecture total
Designed to provide students with the information and decision-making tools needed for planning and implementing a successful lifelong financial plan. Topics will include budgeting, debt management, savings and other investment vehicles, taxes, insurance, and retirement planning.

FSS 60 LIFE MANAGEMENT - 3 Units (formerly HOEC 60)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course provides students with skills for understanding and using both internal and external resources to function effectively in our present and future society. The effects of cultural forces and future trends will be covered in reference to individual and family values, standards, and goals. Students will be required to analyze and integrate established principles with self-understanding in both decision-making and creating lifetime goals for themselves. Strategies in time management, energy management, stress management and conflict management will also be covered.

FSS 94 FAMILY STUDIES AND SERVICES WORKSITE LEARNING - 1-8 Units
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## FSS 197 SPECIAL TOPICS IN FAMILY STUDIES - .5-2 Units (formerly HOEC 197)

Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in family studies. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## FIRE TECHNOLOGY (FIRS)

FIRS 70 FIRE PROTECTION ORGANIZATION - 3 Units
Class Hours: 54 lecture total
Provides an introduction to fire protection; career opportunities and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics.

## FIRS 71 FIRE BEHAVIOR AND COMBUSTION - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course of study presents theory and fundamentals of how and why fires start, spread, and are controlled; an in-depth study of fire chemistry and physics; fire characteristics of materials; extinguishing agents; and fire control techniques. This course may be offered in a distance education format.

FIRS 72 FIRE PREVENTION TECHNOLOGY - 3 Units
Class Hours: 54 lecture total
Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation and fire safety education.

FIRS 73 WILDLAND FIREFIGHTER I ACADEMY - 4 Units
Grading: Pass/No Pass Only
Class Hours: 36 lecture/108 lab total
Review of fire behavior, equipment, and apparatus; cover basic wildland firefighting tactics and strategy, methods of attack, and pre-planning fire problems. Course meets or exceeds the minimum requirements for entry-level firefighter positions in the California Department of Forestry (CDF) and the United States Forest Service (USFS). Note: To be considered for seasonal Firefighter positions by CDF, you must also hold additional certificates. Students should contact CALFIRE for additional information.

FIRS 74 FIRE PROTECTION EQUIPMENT AND SYSTEMS - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers. This course may be offered in a distance education format.

FIRS 76 FIRE HYDRAULICS - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture/4 lab total
Review of basic mathematics, hydraulic laws and formulas as applied to the fire service, application of formulas and mental calculation to hydraulic problems, underwriters' requirements for pumps recommended.

## FIRS 79 FUNDAMENTALS OF PERSONAL FIRE SAFETY - 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course will introduce the student to fundamental issues relating to fire fighting safety and survival. Students will evaluate case studies in which firefighters have been killed or injured. In addition, each student will be required to give an oral presentation based on an analysis of a "near miss" fatal fire/rescue scenario. This course may be offered in a distance education format.

## FIRS 85 FIRE COMMAND IA - 2 Units (formerly FIRS 85A)

Grading: Pass/No Pass Option
Class Hours: 40 lecture total
This course provides an in-depth analysis of the principles of fire command and fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground.

FIRS 86 BUILDING CONSTRUCTION FOR FIRE PROTECTION - 3 Units Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is the study of the components of building construction that relate to fire safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at fires. The development and evolution of building and fire codes will be studied in relationship to past fires in residential, commercial, and industrial occupancies. This course may be offered in a distance education format.

FIRS 87 FIRE COMMAND IB - 2 Units (formerly FIRS 85B)
Grading: Pass/No Pass Option
Class Hours: 40 lecture total
This course covers company and multi-company fire command issues including wildland fires, hazardous materials incidents, and major medical incidents.

## FIRS 94 FIREFIGHTER TRAINEE WORKSITE LEARNING - 1-8 Units

Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

FIRS 100 BASIC FIRE COMPANY OPERATIONS - 2 Units
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
To provide the student with first hand knowledge of actual fire conditions. Student will learn terminology used in the field, and how to work in the chain of command under emergency conditions, company procedures, shift routine, and engine company evolutions. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

## FIRS 101 FIRE TECHNOLOGY CAREER PLACEMENT - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 54 lab total
Designed to assist the student in the final semester of vocational program to learn interview techniques, to develop an employment portfolio, and to interview with several potential employers with the express purpose of assisting the student to obtain the best employment upon graduation.

## FIRS 102 APPRENTICESHIP ACADEMY - 1.5 Units

Grading: Pass/No Pass Option
Class Hours: 18 lecture/27 lab total
This course will cover hazardous building materials/construction methods, rescue strategies, ventilation techniques, pre-plan methods, cautions regarding lab fires and instructional techniques for new personnel. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

## FIRS 104 FIREFIGHTER I ACADEMY - 21 Units

Class Hours: 234 lecture/450 lab total
This course exceeds the minimum educational requirements established by the California State Fire Marshal's Office for State Certification as a Firefighter 1. This academy is an accredited regional academy approved by the California State Board of Fire Service. Final certification as a Firefighter 1 is verified by the State Fire Marshal's Office after the student completes the Academy, works as a volunteer Firefighter for one year or a full-time paid Firefighter for six months. Students successfully completing this course will receive numerous stand alone certificates such as: CalFire Wildland Firefighter; State Fire Marshal's Auto Extrication, Confined Space Awareness, EMS First Responder and others. Note: Based on scheduling and instructor availability issues, this course may meet four or five days a week with occasional night classes, and additional weekend days may be required. Preset/scheduled dates and times may be shifted as needed to accommodate facility usage, equipment demands, weather, skills development needs and instructor availability. When dates and times are shifted, the total amount of required class time will not differ from those hours as listed on the first class handout.

## FIRS 105 DRIVER/OPERATOR 1A: EMERGENCY VEHICLE OPERATIONS 1.5 Units

Note: Student must provide a fire engine for the driving portions of the course. Student must possess a valid Class B California Driver's License. Class Hours: 18 lecture/27 lab total
Designed to provide the student with information on driver techniques for emergency vehicles and techniques of basic inspection and maintenance for emergency vehicles, including actual driving exercises under simulated emergency conditions.

FIRS 106 DRIVER/OPERATOR 1B: PUMP OPERATIONS - 1.5 Units
Note: Student must provide a fire engine for the driving portion of the course. Student must possess a valid Class B California Driver's License.
Class Hours: 18 lecture/27 lab total
Course provides the student with the information, theory, methods and techniques for operating fire service pumps, including: types of pumps, engine and pump gauges maintenance, unsafe pumping conditions, pressure relief devices, cooling systems, water supplies, drafting field hydraulics, and pumping operations.

## FIRS 108 FIREFIGHTER II ACADEMY - 5 Units

Notes:

1. Students will have to provide their own safety equipment, which meets NFPA standards. Equipment will include: helmet, gloves, structural fire fighting coat and pants, boots, eye protection, etc.
2. To receive a California State Fire Marshal's Certification, students must have completed FIRS 104 prior to enrollment in FIRS 108.
Class Hours: 72 lecture/54 lab total
An extended format of the Firefighter I course with advanced skills. Designed to provide the Firefighter I with both manipulative and technical skills. Course approved by the California State Board of Fire Services and California State Fire Marshal's Office. Upon successful completion of course work, Firefighter II certification will be granted. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 113 FIRE CREW SUPERVISOR - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
The course is designed to complement existing fire crew captain training by presenting techniques for supervision of inmates, wards, and residents; conducting investigations; effective report writing; and understanding the legal rights of inmates, wards, and residents. The practical application of these supervision skills will be emphasized using simulated training experiences. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 116 ENGINE ACADEMY - 3 Units
Grading: Pass/No Pass Option
Note: Students must have completed the following course prior to enrollment in FIRS 116 in order to receive a USDA certification; Crew Boss S-230 114, U.S. Forest Operator's Permit for Engine Operator F-5.
Class Hours: 36 lecture/54 lab total
A course designed to provide classroom training, field familiarization, and drills of all water-use and related equipment used in wildland fire suppression. The student will obtain information, practical experience and a working knowledge of all water-use and related equipment used in wildland fire suppression, fire safety suppression tactics, engine company operations standards. A USDA certificate of training will be issued upon successful completion of this course.

## FIRS 118 INTRODUCTION TO WILDLAND FIRE FIGHTING - 1.5 Units

 Class Hours: 18 lecture/27 lab totalThis course meets requirements in the natural resources and fire science programs. A review of fire chemistry, equipment, and manpower, basic fire fighting strategy, methods of attack, pre-planning fire problems, and fire line safety are included in the course. A.U.S. Forest Service USDA Certificate of Training (Basic Firefighter's Training) may be issued after satisfactory completion of this course. Approximately 50 percent of labs will be in the field.

FIRS 119 PREPARING FOR INCIDENT COMMAND - 1 Unit (P/NP Option) Note: This course is designed for the volunteer firefighter.
Class Hours: 18 lecture total
This course deals with the preparation phase of commanding an emergency incident. Subjects covered are firefighter's survival, fire behavior, fire flow and communications. This course is designed for the professional firefighter who may be responsible for functioning as a "first-in" incident commander.

FIRS 120 INCIDENT COMMAND SYSTEM ICS-200 - . 5 Unit
Grading: Pass/No Pass Option
Class Hours: 12 lecture total
Designed to introduce firefighters to the Incident Command System. Emphasis will be on system design principles, components of the system, positional responsibilities, and the common responsibilities of personnel assigned to the organization. (This course is a prerequisite to further positional training under the Incident Command System). Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

## FIRS 123 DIVISION/GROUP SUPERVISOR (I-339) - 2 Units

Class Hours: 40 lecture total
This course covers training that is needed by staff to perform the position of Division/Group Supervisor during an emergency situation. The course will teach management skills within the framework of the Incident Command System. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

## FIRS 124 FIRE FIGHTING IN THE I-ZONE - 2 Units

Grading: Pass/No Pass Option
Class Hours: 40 lecture total
This course is designed to meet the training needs to initial and extended attack incident commanders and company officers confronting wildland fires that threaten life, property and improvements. This course is designed for professional firefighters.

## FIRS 131 HAZARDOUS MATERIALS TECHNICIAN IA - 2.5 Units

Grading: Pass/No Pass Option
Class Hours: 45 lecture total
An intense introduction to the nature and behavior of inorganic and organic chemicals. This course examines the physical and chemical properties of matter, its atomic structure, salts and non-salts, hydrocarbons and hydrocarbon derivatives, the forms of energy, flammable and combustible liquids, cryogenics, and the combustion process. Various laws of chemistry are discussed as they apply to organic compounds, flammable liquids and gases and other types of hazardous materials. Module 1 of 4 of the Haz-Mat Technician certification series. Note: To receive a Calif. State Fire Marshal's Office (CSFMO) Certification or a Calif. Specialized Training Institute (CSTI) Certification, the student is strongly encouraged to take these courses in the following sequence: Hazmat Operations followed by FIRS 131, 132, 133, and 134 in that order. Students who want to receive CSFM or CSTI Certification will be required to take a supplemental certification test and pay a certification fee to the CSFMO or CSTI.

FIRS 132 HAZARDOUS MATERIALS TECHNICIAN 1B - 2.5 Units Grading: Pass/No Pass Option
Class Hours: 45 lecture total
An application of the information covered in FIRS 131 Hazardous Materials Technician IA, including the chemistry and hazards of various materials, chemical incompatibilities, and the products of combustion. Provides the technical foundation for specific operational strategies, field monitoring and detection devices with an emphasis placed on the safety associated with working around chemicals. Module 2 of 4 Haz-Mat Technician certification series. CSTI certification fees and materials fees will be charged. Note: To receive a California State Fire Marshal's Office (CSFMO) Certification or a California Specialized Training Institute (CSTI) Certification the student is strongly encouraged to take these courses in the following sequence: Hazmat Operations followed by FIRS 131, 132, 133, and 134 in that order. Students who want to receive CSFMO or CSTI Certification will be required to take a supplemental certification test and pay a certification fee to the CSFMO or CSTI.

## FIRS 133 HAZARDOUS MATERIALS TECHNICIAN 1C - 2.5 Units

Grading: Pass/No Pass Option
Class Hours: 45 lecture total
A study of the legal, organizational, technical, and practical aspects of response to hazardous materials emergencies including the laws and regulations related to hazardous materials, the use of the Incident Command System, and protective actions, clothing, and equipment. Examines the Hazardous Materials Group I depth and the positions are exercised in a practical evaluation scenario. Module 3 of 4 of Haz-Mat Technician certification series. CSTI certification fees and materials fees will be charged. Course meets CSFM certification requirements and is graded Credit/No Credit. Note: To receive a California State Fire Marshal's Office (CSFMO) Certification or a California Specialized Training Institute (CSTI) Certification the student is strongly encouraged to take these courses in the following sequence: Hazmat Operations followed by FIRS 131, 132, 133, and 134 in that order. Students who want to receive CSFMO or CSTI Certification will be required to take a supplemental certification test and pay a certification fee to the CSFMO or CSTI.

## FIRS 134 HAZARDOUS MATERIALS TECHNICIAN 1D - 1.5 Units

Grading: Pass/No Pass Option
Class Hours: 18 lecture/27 lab total
Hands-on training in tactical field operations with various tools and specialized equipment involving the collection of evidence, containment methods, and techniques. Methods for identifying hazardous materials transported by rail car and highway motor vehicles are examined as well as clandestine drug labs, pipelines, and fixed facilities. Module 4 of 4 of Haz-Mat Technician certification series. Note: To receive a California State Fire Marshal's Office (CSFMO) Certification or a California Specialized Training Institute (CSTI) Certification the student is strongly encouraged to take these courses in the following sequence: Hazmat Operations followed by FIRS 131, 132, 133, and 134 in that order. Students who want to receive CSFMO or CSTI Certification will be required to take a supplemental certification test and pay a certification fee to the CSFMO or CSTI.

## FIRS 135 INTERMEDIATE INCIDENT COMMAND SYSTEM: FOR EXPANDING

 INCIDENTS, I 300-1.5 Units
## Grading: Pass/No Pass Option

## Class Hours: 27 lecture total

A course of study describing the responsibilities of the organizational elements within each section of the ICS, staffing considerations, and reporting relationships. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Div. or at the National Interagency Fire Center Web Site (NIFC.gov).

## FIRS 136 ADVANCED INCIDENT COMMAND SYSTEM I-400-1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total
A course of study that presents Incident Command System relationships and duties of Command Staff members, Agency Representatives, and activation of the Command and General Staff positions. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the U.S. Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Tech. Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FIRS 139 HAZMAT FIRST RESPONDER OPERATIONS-LEVEL REFRESHER - . 5 Unit

Grading: Pass/No Pass Option
Limitation on Enrollment: Any OSHA approved HAZMAT operations course Class Hours: 9 lecture total
This course is designed for students who are currently trained to the Hazardous Materials, First Responder, Operations-level. Students will complete mandated annual refresher training of sufficient content and duration to maintain competencies at the First Responder, Operational level.

FIRS 140 JUVENILE FIRESETTER - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course will focus on psychodynamics and treatment options, interviewing techniques, legal issues, community resources and networking concerning juvenile fire setters. The target audience for this class is fire service personnel, burn care professionals, mental health counselors, RNs, social workers, psychologists, psychiatrists, judicial system personnel and other health care professionals. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 145 LOW ANGLE RESCUE - . 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture/9 lab tota
A course designed to train firefighters and emergency medical personnel in low angle rescue techniques. Students will learn about equipment, identification, and care. Note: Students will have to provide their own safety equipment which meets NFPA standards. Equipment will include helmet, gloves, structural fire fighting coat and pants, boots, eye protection, etc.

FIRS 146 STANDARD FOR SURVIVAL - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course examines significant areas of firefighter fatalities and injuries associated with emergency and non-emergency situations. The course addresses causes of fatalities and injuries, and methods to implement recommended solutions. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

## FIRS 147 CONFINED SPACE AWARENESS AND RESCUE - . 5 Unit

## Grading: Pass/No Pass Option

Class Hours: 9 lecture total
This introductory level training will familiarize public safety personnel with codes and laws impacting confined space rescues, define terms, identify hazards, and prepare them for operational level training. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 148 RESCUE SYSTEMS I-1.5 Units
Note: Students are required to provide personal safety equipment at a significant cost to the student. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.
Class Hours: 18 lecture/27 lab total
A course designed to train firefighters, in paid or volunteer fire departments and emergency medical personnel, in vertical rescue techniques. Students will learn about equipment, identification, and care, applying techniques, belaying and raising and lowering the rescue basket, and safety. This course is designed to train students for vertical or high angle or rope rescue situations. Students may be required to train at heights of up to 200' above ground.

FIRS 149 AUTO EXTRICATION - . 5 Unit
Grading: Pass/No Pass Only
Class Hours: 9 lecture/9 lab total
To introduce principles of Auto extrication; use of basic hand tools, rescue tools, pulling and spreading operations, patient handling, and vehicle stabilization. Actual practice and application of the methods are taught in class. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 151 FIRE CONTROL 1: BASIC FIRE CHEMISTRY - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course is a basic overview of fire chemistry and fire behavior designed for the beginning or volunteer firefighter. Includes classes of fire, fundamentals of heat transfer, fire characteristics of materials, products of combustion, hazardous and explosive materials, extinguishing agents, size up, and exposure protection. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 152 FIRE CONTROL 2: STRUCTURAL - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
A course designed to provide the student with information, methods and techniques for operating basic fire fighting tools and carrying out basic fire fighting evolutions. Areas covered include hose, nozzles, and fitting; ground ladders, self contained breathing apparatus; pump operations in theory; pump operations in the field; and the use of fire extinguishers. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

## FIRS 153 FIRE CONTROL 3: STRUCTURAL FIRE FIGHTING - . 5 Unit

Grading: Pass/No Pass Option
Notes: (1) Student must provide evidence of having met necessary respirator fit testing standards prior to first day of class. (2) Student must provide evidence of having met department's physical fitness standards for fire fighting. (3) Student must provide NFPA compliant personal protective equipment and self contained breathing apparatus.
Class Hours: 9 lecture/9 lab total
This course utilizes the burning of derelict buildings to provide students with handson fire fighting experience in fire behavior within a building, ventilation; SCBA use and survival techniques, interior fire attack, exterior fire attack, and basic fire investigation as it relates to fire fighting.
This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 154 FIRE CONTROL 4: GAS \& OIL FIRE FIGHTING - . 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture/9 lab total
Classroom and field instruction on Basic Fire Control relating to Emergency Operations. To develop the knowledge and attitude necessary to safely, in emergency and non-emergency modes, control gas and liquid fires.

## FIRS 156 FIRE CONTROL 6: WILDLAND FIREFIGHTING ESSENTIALS 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This wildland fire fighting course provides information, methods and techniques for the utilization of: wildland tactics, hand tools, and hoselays; wildland hand crew operations; and the use of aircraft and bulldozers for wildland fire fighting. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

## FIRS 157 FIRE ENGINE DRIVER TRAINING - 1 Unit

Grading: Pass/No Pass Option
Limitation on Enrollment: In order to complete the requirements of this course and be able to participate in the hands-on-driving portion of the course, all students must obtain from the DMV a Class " $B$ " Restricted Firefighter Drivers License Permit, or possess a valid California Class "B" license, or obtain a California Class "B" permit. Notes: (1) Fire engines must be provided by the students sponsoring agency for drivers training and are responsible for all costs incurred as a result of the use of the vehicle in the training program including insurance which meets district standards. (2) All engines must be equipped with seat belt devices for driver and passenger seat in main cab. (3) Student must provide documentation that engine successfully completed a department "pre-trip" inspection.
Class Hours: 9 lecture/27 lab total
A course of both classroom instruction and field application on basic driving laws relating to a California "Restricted Firefighter Drivers License." This course is designed to develop driving knowledge, attitudes, and skills necessary to operate fire engines safely. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

## FIRS 158 PUMP OPERATIONS - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total
A course designed to develop a knowledge of fire pumps. Subjects to be covered are pumping principles, practical hydraulics, and the ability to drive apparatus and operate pumps.

## FIRS 159 FIRE ENGINE DEFENSIVE DRIVING - . 5 Unit

Grading: Pass/No Pass Option
Class Hours: 9 lecture total
Classroom instruction on basic driving laws relating to Emergency Vehicle Operations. To develop: Emergency Vehicle Operations, driving knowledge, and attitude necessary to operate their vehicles safely in emergency and non-emergency modes. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 179 FIRE ATTACK STRATEGY \& TACTICS - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 lab total
This course will overview the technical and practical management of fire ground operations of commercial and residential structures by company officers. This course meets NFPA 1021 Standards for Fire Officer I.

## FIRS 180 FIRE MANAGEMENT 1 - 2.5 Units

Class Hours: 45 lecture total
To provide fire service personnel with the basic understanding of supervision and management concepts practices, and theories. Designed for both in-service and pre-service personnel to develop skills that can be used presently and in future career goals.

## FIRS 183 FIRE PREVENTION 1A, INTRODUCTION TO THE CALIFORNIA FIRE CODE - 2 Units

Class Hours: 40 lecture total
This course is designed to instruct students in the areas of fire prevention functions. Topics include: responsibilities, authority for code enforcement, occupancy classifications, building preparation, records management, exiting requirements, plan review, and fire safety education. This course is one of a series for fire officer course work to meet State of California Fire Officer and Fire Prevention Officer certification.

## FIRS 184 FIRE PREVENTION 1B, INSPECTION OF FIRE PREVENTION SYSTEMS \& SPECIAL HAZARDS - 2 Units

## Class Hours: 40 lecture tota

Designed to instruct students in the operation and inspection of extinguishers, fixed system, sprinklers, standpipes and alarm systems. Provide technical information on hazardous materials, flammable and combustible liquids and compressed liquefied gasses. Course is one of a series for fire officer course work to meet State of California Fire Officer Certification.

## FIRS 185 FIRE COMMAND 2A, COMMAND TACTICS AT MAJOR FIRES 1.5 Units

Class Hours: 18 lecture/27 lab total
Course prepares the officer to use management techniques and Incident Command Systems when commanding multiple alarms or large suppression forces.

## FIRS 189 FIRE INVESTIGATION 1A - 2 Units

Grading: Pass/No Pass Option
Class Hours: 40 lecture total (when offered in the Distance Education format, hours will total 112)
This course of study presents theory and fundamentals of fire/explosion investigation techniques. The course material includes theory of legal search and seizure, burn pattern analysis, collection of evidence, ignition sources, fire investigations of structures, vehicles and wildland, report writing, and testifying in court as a fire cause and origin expert. This course may be offered in a distance education format.

## FIRS 191 FIRE INVESTIGATION 1B - 2 Units

Class Hours: 36 lecture/9 lab total (when offered in the Distance Education format, hours will total 117)
This course concentrates on fire evidence identification, preservation and collection including blood stains, paint and fiber evidence, volatile flammables, soil and gunshot residue, fingerprint/shoe print and the track impressions, etc. In addition, this course covers interviewing, fire information sources, and investigation of fatal fires. This course may be offered in a distance education format.

FIRS 192 FIRE INVESTIGATION REVIEW - . 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This is a review course to update fire service personnel in the latest techniques used in fire investigation work, and give information on the following: juvenile firesetter, report writing, evidence collection, preservation procedures, law and legal problems.

## FIRS 193 TRAINING INSTRUCTOR 1A (COGNITIVE) - 1.5 Units

 (formerly FIRS 181)Class Hours: 18 lecture/27 lab total (when offered in the Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab, totaling 81 hours for this course)
This is the first of a three-course series. Topics include methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching cognitive lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two (2) student instructor teaching demonstrations are required of all. The lecture portion of this course may be offered in a distance learning format.

FIRS 194 TRAINING INSTRUCTOR 1B (PSYCHOMOTOR) - 1.5 Units (formerly FIRS 182)
Prerequisite: A grade of C or higher in FIRS 193
Class Hours: 18 lecture/27 lab total (when offered in the Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab, totaling 81 hours for this course)
This is the second of a three-course series. Topics include methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching psychomotor lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two (2) student instructor teaching demonstrations are required of all. The lecture portion of this course may be offered in a distance learning format.

FIRS 195 TRAINING INSTRUCTOR 1C (INSTRUCTIONAL DEVELOPMENT TECHNIQUES) - 1.5 Units
Prerequisite: A grade of C or higher in FIRS 193 and FIRS 194
Class Hours: 18 lecture/27 lab total (when offered in the Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab, totaling 81 hours for this course)
This is the third of a three-course series. Topics include methods and techniques for developing lesson plans, ancillary components, and tests in accordance with the latest concepts in career education. The course offers the opportunity to develop, receive feedback, and finalize instructional materials and deliver a teaching demonstration. Two (2) student instructor teaching demonstrations are required of all. The lecture portion of this course may be offered in a distance learning format.

FIRS 197 SPECIAL TOPICS IN FIRE TECHNOLOGY - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in fire technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes.
Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## FIRS 198 SPECIAL SKILLS TOPICS IN FIRE TECHNOLOGY - .5-2 Units

 Grading: Pass/No Pass OptionClass Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in fire technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## FIRS 360 LIVE FIRE TRAINING, BASIC STRUCTURAL OPERATIONS 0 Units

Class Hours: 9 lecture/9 lab total
This course provides the student with hands-on fire fighting experience in fire behavior, ventilation, overhaul, interior and exterior fire attack operations.

## FIRS 361 ROPE RIGGING FOR RESCUE - 0 Units

Class Hours: 9 lecture/9 lab total
This course provides the student with hands-on rescue experience in utilizing ropes and related rope rescue equipment. Topics will include: incident and scene assessment, ropes and hardware, knots, rappelling techniques and mechanical advantage systems.

## FIRS 362 BASIC FIRE BEHAVIOR AND CHEMISTRY - 0 Units

Class Hours: 18 lecture total
This course provides the student with the concepts of the fire triangle and tetrahedron, fire chemistry, fire behavior, products of combustion, types of extinguishing agents, hazardous materials properties and effects, and oxidizing agents.

FIRS 363 BASIC STRUCTURAL OPERATIONS FOR VOLUNTEERS - 0 Units Class Hours: 18 lecture total
This course is designed to provide the volunteer firefighter with the fundamental concepts and skills for operating at residential and light commercial structure fires. Topics include the use of handlines, ground ladders, self-contained breathing apparatus, pump operations and the use of fire extinguishers.

FIRS 364 PUMP OPERATIONS FOR VOLUNTEERS - 0 Units
Class Hours: 18 lecture total
A course designed to develop knowledge of fire pumps. Subjects to be covered include pumping principles, practical hydraulics, and the ability to drive apparatus and operate pumps.

FIRE TECHNOLOGY/WILDLAND
FIRE TECHNOLOGY LOGISTICS (FTWL)
FTWL 101 WILDLAND FIRE BEHAVIOR - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course of study is to provide the information necessary to understand wildland fire behavior. The course includes influences that affect basic wildland fire behavior, the seven wildland fire environment factors which must be continuously monitored in making wildland fire behavior predictions, and providing the tools to make spot fire behavior predictions.

FTWL 102 WILDLAND FIREFIGHTER SAFETY AND SURVIVAL - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course of study places emphasis on avoiding situations and conditions which have resulted in fire shelter deployments, serious injuries and fatalities for wildland firefighters.

FTWL 103 WILDLAND FIRE OPERATIONS - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course of study presents the command structure and operational processes for ground and air operations in the control of wildland fires.

FTWL 104 WILDLAND PUBLIC INFORMATION OFFICER, PREVENTION, AND INVESTIGATION - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
A course of study, which presents the information necessary to understand the roles and functions of the wildland fire information officer, wildland fire prevention, and investigation of wildland fires.

FTWL 105 WILDLAND FIRE PLANNING, LOGISTICS, AND FINANCE - 3 Units Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course of study explains the roles, responsibilities and functions of the planning, logistics, and finance sections that are utilized during the control of wildland fires.

FTWL 106 INTRODUCTION TO INCIDENT COMMAND SYSTEM I-100 - . 5 Unit Grading: Pass/No Pass Option
Class Hours: 9 lecture total
Introduction to Incident Command System I-100 is designed to teach the principles of the Incident Command System and the basic ICS structure and terminology. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 110 DISPLAY PROCESS S-245-. 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
A course of study that presents information to enable the student to be able to function as a Display Processor on a wildland fire incident. The course includes how to determine logistical needs, including work materials and work area, how to identify sources of information and collect data, and to identify and be able to create required maps, overlays and displays. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 111 CHECK-IN RECORDERISTATUS RECORDER S-248-1 Unit Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to understand the duties and responsibilities of a Check-in Recorder/Status Recorder on a wildland fire. The course presents how to record information on location and status of equipment, record information of personnel on appropriate forms, and develop organization charts and assignment lists based on information recorded. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current
employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 112 ORDERING MANAGER J-252-. 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study presents the necessary information for the student to be able to function as an Ordering Manager on a wildland fire incident. The course includes establishing ordering procedures, set up filing system, identify times and locations for delivery of supplies and equipment, and submission of all ordering documents to documentation control unit before demobilization. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 113 RECEIVING AND DISTRIBUTION MANAGER J-253-. 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study presents the necessary information for the student to function as a Receiving and Distribution Manager on a wildland fire. The course includes establishing procedures for receiving supplies and equipment, review incident action plan and operational instructions provided by logistics section concerning scope and duration of incident operations that may involve supply requirements, determine supply unit personnel requirements, inspect and accept supplies, and provide inventory records to documentation unit upon demobilization of supply unit. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 114 BASE/CAMP MANAGER J-254-2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents the information necessary for the student to be able to function as a Base Camp Manager on a wildland fire incident. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWL 115 EQUIPMENT MANAGER J-255-1.5 Units

Grading: Pass/No Pass Option

## Class Hours: 27 lecture total

This course of study presents the information necessary for the student to be able to function as an Equipment Manager on a wildland fire incident. This course includes obtaining necessary equipment and supplies, how to provide maintenance and fueling according to schedule, preparation of schedules to maximize use of available transportation, inspection of equipment, and preparation and use of proper equipment agreements. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 116 TOOL \& EQUIPMENT SPECIALIST J-256 - . 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study presents the necessary information for the student to function as a Tool and Equipment Specialist on a wildland fire incident. The course includes utilization of work space, work assignment, numbers and kinds of tools ordered/on
hand, determine personnel requirements, establish a tool inventory and accountability system, ensure that all appropriate safety measures are taken in tool conditioning area, and demobilize tool area in accordance with incident demobilization plan. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWL 117 INCIDENT COMMUNICATIONS CENTER MANAGER J-257 1.5 Units

Grading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study presents the information needed by the student to function as a Communications Manager on a wildland fire incident. This includes how to establish the incident communications/message center, acquire supplies to set up and operate the incident communications/message center, and how to organize and manage the incident communications/message center. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 118 INCIDENT COMMUNICATIONS TECHNICIAN S-258 - 2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents information necessary for the student to be able to function as a Communications Unit Leader on a wildland fire incident. This course includes clear text radio transmissions, interrelationships between ICS functions and the Communications Unit Leader, organize and staff the Communications Unit, and develop an effective communications plan based on the needs for each operational period and complete the necessary paperwork and forms. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 119 SECURITY MANAGER J-259-. 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study presents the information needed by the student to function as a Security Manager on a wildland fire incident. This course includes briefing information from facilities unit leader, how to establish contacts with local law enforcement agencies as required, special custodial requirements which may affect security operations, and develop a security plan. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWL 120 INTERAGENCY INCIDENT BUSINESS MANAGEMENT S-260 1.5 Units

Grading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study presents an understanding of the fiscal issues of wildand firefighting. It includes employee responsibilities and conduct, be able to recruit personnel and equipment for wildland firefighting, and provide fiscally sound equipment and personnel time recording. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov)

FTWL 121 PERSONNEL TIME RECORDER J-261 - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as a personnel time recorder on a wildland fire incident. This course includes establishing and maintaining employee time reports within the first operational period; how to initiate, gather, or update a time report from all applicable personnel assigned to the incident for each operational period, and ensure that all employee identification information is verified to be correct. Includes contractors and commissary records, and personnel pay documents. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 122 EQUIPMENT TIME RECORDER J-262-1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as an Equipment Time Recorder on a wildland fire incident. This course includes how to establish and maintain equipment time reports within the first operational period, the necessary steps to initiate, gather, or update a time report from all applicable equipment assigned to the incident for each operational period and how to close out equipment time documents prior to personnel or equipment leaving the incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 123 CLAIMS MANAGER J-263-1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as a Claims Manager on a wildland fire incident. This course presents what is required for handling all claims related activities (other than injury) for the incident, utilization of proper support for conducting a claims investigation, preparation of claim reports, and provide information to protect the interest of the government. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 124 COMPENSATION FOR INJURY MANAGER J-264-1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as a Compensation for Injury Manager on a wildland fire incident. This course includes how to investigate and document all personnel injury or deaths related to activities on the incident, utilization of the proper support for conducting an injury or death investigation, and preparation of compensation for injury documents in accordance with agency policy and procedures. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 125 COMMISSARY MANAGER J-266-1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as a Commissary Manager on a wildland fire incident. The course includes how to set up and provide commissary operation to meet incident needs maintaining complete record of commissary stock including invoices for material received, issuance records, transfer records and closing inventories, and demobilize commissary operation in accordance with incident demobilization plan. Note: While
any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWL 126 DOCUMENTATION UNIT LEADER J-342 - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as a Documentation Unit Leader on a wildland fire incident. This course includes how to establish and organize incident files, retention and filing of duplicate copies of official forms and reports, preparation of incident documentation for planning section chief when requested and maintain, retain, and store incident files for after incident use. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 127 SITUATION UNIT LEADER S-346 - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as a Situation Unit Leader on a wildland fire incident. This course includes how to collect all incident related data for the duration of the incident, utilization of infrared data as applicable, post data on unit work displays and command post displays at scheduled intervals or as requested by command post personnel and provide resources and situation status information in response to specific requests. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 128 DEMOBILIZATION UNIT LEADER S-347-1 Unit
Grading: Pass/No Pass Option

## Class Hours: 18 lecture total

This course of study presents the information necessary for the student to be able to function as a Demobilization Unit Leader on a wildland fire incident. This course includes objectives, priorities, and constraints on demobilization from the planning section chief, agency representatives, and contractors as applicable, how to obtain identification and description of surplus resources and probable release times, developing release procedures in coordination with other sections/units and agency dispatch center, and coordinate and closely supervise the demobilization process. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 129 RESOURCES UNIT LEADER S-348 - 1.5 Units
Grading: Pass/No Pass Option

## Class Hours: 27 lecture total

This course of study presents the information necessary for the student to be able to function as a Resource Unit Leader. This course covers how to gather, post, and maintain incident resource status, gather, post, and maintain resource status of transportation and support vehicles and personnel, and maintain master list of all resources checked in at the incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 130 FACILITIES UNIT LEADER S-354-2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents an understanding of the duties and responsibilities of the Facilities Unit Leader in a wildland fire incident. The course presents factors in determining requirements for each facility, layouts of incident facilities and activation of incident facilities. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 131 GROUND SUPPORT UNIT LEADER S-355-. 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study presents the information necessary for the student to be able to function as a Ground Support Unit Leader on a wildland fire incident. The course includes how to implement traffic plan developed by planning section, activating fueling, maintenance, and repair of ground resources, how to requisition maintenance and repair supplies, and how to maintain incident roads. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 132 SUPPLY UNIT LEADER S-356-1.5 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study presents the information necessary for the student to be able to function as a Supply Unit Leader on a wildland fire incident. This course includes description of the activities of the Supply Unit, what is needed to set up and staff Supply Unit, organization of and staffing of Supply Unit, and demobilization. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWL 133 FOOD UNIT LEADER S-357-1.5 Units

## Grading: Pass/No Pass Option

Class Hours: 27 lecture total
This course of study presents the information necessary for the student to be able to function as a Food Unit Leader on a wildland fire incident. This course includes how to determine the method of feeding to best fit each situation, obtain the necessary equipment and supplies to operate food service facilities at base and camps, and ensure that all appropriate health and safety measures are taken. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWL 134 COMMUNICATIONS UNIT LEADER S-358-4 Units

Grading: Pass/No Pass Option
Class Hours: 72 lecture total
This course of study presents the information necessary for the student to be able to function as a Communications Unit Leader on a wildland fire incident. The course includes how to assess communications capabilities/limitation during preparation of the incident action plan, preparation and implementation of the incident radio communications plan, and supervise communications unit activities. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 135 MEDICAL UNIT LEADER S-359-1.5 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study presents the information necessary for the student to be able to function as a Medical Unit Leader. This course covers how to determine level of emergency medical activities, activate medical unit, preparation of the Medical Emergency Plan, and respond to requests for medical aid. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 136 COST UNIT LEADER I-362 - . 5 Units
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study presents the information necessary for the student to be able to function as a Cost Unit Leader on a wildland fire incident. The course includes how to set up a system for collecting and documenting all expenditures relating to a wildland fire incident, establishing procedures for collecting cost data, coordination with appropriate personnel, and prepare reports in accordance with agency policy and procedures. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 137 COMPENSATION/CLAIMS UNIT LEADER I-363-1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as a Compensation/Claims Unit Leader on a wildland fire incident. The course includes how to set up system for investigating, documenting, and processing claims, initiate investigations on claims, and preparation of claim reports in accordance with agency policy and procedures. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 138 TIME UNIT LEADER I-365-. 5 Unit
Grading: Pass/No Pass Option
Class Hours: 12 lecture total
This course of study presents the information necessary for the student to be able to function as a Time Unit Leader on a wildland fire incident. The course includes how to set up system for documenting all personnel assigned to a wildland fire incident, establish procedures for collecting time data, set up commissary operation, and prepare reports in accordance with agency policy and procedures. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov)

## FTWL 139 PROCUREMENT UNIT LEADER I-368-. 5 Unit

Grading: Pass/No Pass Option
Class Hours: 12 lecture total
This course of study presents the information necessary for the student to be able to function as a Procurement Unit Leader on a wildland fire incident. The course includes how to set up a system for collecting and documenting all equipment assigned to a wildland fire incident, how to administer vendor contracts, establish procedures for collecting time data, and prepare reports in accordance with agency policy and procedures. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1
standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 140 PLANNING SECTION CHIEF S-440 - 1.5 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study presents the information necessary for the student to be able to function as a Planning Section Chief on a wildland fire incident. The course includes how to develop the relationship between the other General Staff members and the Planning Section Chief, supervise the planning function, and receive information routinely or as requested about operations activities from Situation Unit field observers and operations personnel. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 141 LOGISTICS SECTION CHIEF S-450-2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents the information necessary for the student to be able to function as a Logistics Section Chief on a wildland fire incident. The course includes how to organize and staff the Logistics Section to meet the needs of a wildland fire incident, demobilize the Logistics Section according to the demobilization process at a wildland fire incident, and be able to perform as a Logistics Section Chief at a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 142 FINANCE SECTION CHIEF S-460-2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents the information necessary for the student to be able to function as a Finance Section Chief on a wildland fire incident. The course includes how to establish and be responsible for all financial and cost analysis aspects of the incident, supervising members of the finance section, and ensure that all obligation documents initiated at the incident are properly prepared and completed. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWL 143 MULTI-AGENCY COORDINATION I-401-. 5 Unit

## Grading: Pass/No Pass Option

Class Hours: 9 lecture total
A course of study describing the major elements associated with developing and implementing an effective multi-agency coordination system. This course describes essential differences between Area Command, Multi-Agency Coordination Systems, and Jurisdictional Emergency Operations Centers. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 144 INCIDENT COMMAND SYSTEM FOR EXECUTIVES I-402-. 5 Unit Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study presents an ICS orientation for executives, administrators, and policy makers. It provides a basic understanding of ICS, unified and area command, and multi-agency coordination to those persons responsible for establishing or implementing policy, but who normally are not a part of the on-scene ICS organization. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education
requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FIRE TECHNOLOGY/WILDLAND FIRE TECHNOLOGY OPERATIONS (FTWO)

FTWO 110 BASIC WILDLAND FIRE ORIENTATION S-110 - . 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study provides information that is essential for a non-operations individual assigned to a wildland fire incident to have a successful first assignment. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 111 FIREFIGHTER TRAINING S-130 - 2 Units
Class Hours: 36 lecture total
This course of study is designed to train new firefighters in basic firefighting skills, and the knowledge necessary to effectively handle wildland firefighting situations. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 112 ADVANCED FIREFIGHTER TRAINING S-131-. 5 Unit

Class Hours: 9 lecture total
This course of study provides advanced wildland firefighting training and education for those who wish to become qualified in the first level supervision position of Advanced Firefighter/Squad Boss. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the U.S. Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 113 INTRODUCTION TO WILDLAND FIRE BEHAVIOR S-190 - . 5 Unit Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study provides an introduction to wildland fire behavior issues that are important to wildland fire spread and safety to firefighters involved in suppression. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 114 INITIAL ATTACK INCIDENT COMMANDER TYPE 4 (ICT4) S-200 -

 1.5 UnitsGrading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study is designed to provide the initial attack commander of small non-complex wildland fires with the ability to safely suppress the fire within the guidelines of the Incident Command System, and agency guidelines. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 115 SUPERVISORY CONCEPTS AND TECHNIQUES S-201-1 Unit Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study is for the experienced wildland firefighter to be able to apply the principles of communication and supervision required of a single resource boss to perform on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gv).

## FTWO 116 FIRE OPERATIONS IN THE WILDLANDI URBAN INTERFACE S-215-2 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture total
A course of study to prepare initial attack incident commanders and company officers to effectively deal with wildland fires that threaten life, property, and improvements. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 117 PORTABLE PUMPS AND WATER USE S-211 - 1.5 Units

Class Hours: 27 lecture total
This course of study is for firefighters needing formal training in order to gain competency in the use of portable pumps and water in wildland fire fighting. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 118 WILDFIRE POWERSAWS S-212-1 Unit

Class Hours: 16 lecture/12 lab total
Wildfire Powersaws is a required course for those planning to operate, or directly supervise, the operation of chain saws on wildfires. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov)

FTWO 119 DRIVING FOR THE FIRE SERVICE S-216 - 2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture/12 lab tota
This course of study is designed to instruct fire personnel on proper methods and procedures for driving fire equipment on the highway and off-road conditions. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 120 INTERAGENCY HELICOPTER TRAINING GUIDE S-217-2.5 Units Grading: Pass/No Pass Option
Class Hours: 45 lecture total
A course of study of the tactical and logistical use of helicopters in wildland fire control operations. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards
for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 121 CREW BOSS S-230 - 1.5 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study is to identify the hazards and risks on wildland fires and teach the tactics which are appropriate for the crew boss during the various wildland fire situations. The course also identifies crew boss responsibilities prior to and during mobilization, on the incident and during demobilization. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 122 ENGINE BOSS S-231-. 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study is to prepare advanced firefighters/squad bosses with the ability to understand the function as an engine boss in the control of wildland fires. This course presents the issues of tactics and safety in the control of wildland fires, and identifies the mobilization and demobilization procedures of an engine crew on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 123 DOZER BOSS S-232-1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study is to prepare advanced firefighters/squad bosses with the ability to understand and function as a dozer boss in the control of wildland fires. This course presents the issues of tactics and safety in the control of wildland fires, and identifies the mobilization and demobilization procedures of a dozer on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 124 TRACTOR PLOW BOSS S-233 - 1.5 Units

Grading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study is to prepare advanced firefighters/squad bosses with the ability to understand and function as a tractor/plow boss in the control of wildland fires. This course presents the issues of tactics and safety in the control of wildland fires, and identifies the mobilization and demobilization procedures of a tractor/plow on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 125 IGNITION OPERATIONS S-234-1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture/8 lab total
This course of study presents the application of safety considerations involved in a firing operation. It also provides the student with the necessary information to operate, maintain and use firing devices, and to use backfire as an indirect attack method against a rapidly spreading wildfire. The student will also learn the proper application of fire suppression firing methods and practices. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service

NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 126 FELLING BOSS S-235-1.5 Units

Grading: Pass/No Pass Option
Class Hours: 27 lecture total
The felling boss has the responsibility of building fireline in areas where saws are needed to build fire control lines. The felling boss must determine the capabilities and limitations of the felling crew, identify the special equipment needed for the assignment, understand the issues of tactics and safety in the control of wildland fires, and identify the mobilization and demobilization procedures of a felling crew on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 127 STAGING AREA MANAGER J-236-. 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
The Staging Manager is responsible for establishing and maintaining staging areas where resources are assigned prior to being given a specific fire assignment. The Staging Manager is responsible for all activities in the staging area including determine if there is any need for temporary assignment of logistics service and support (fuel tender, food delivery, sanitation) to staging areas and make arrangements for temporary logistics, if required, by notifying logistics section chief. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 128 FIELD OBSERVER S-244 - 1.5 Units

Class Hours: 18 lecture/27 Lab total
A course of study providing the student with the necessary skills to function as a Field Observer on a wildland fire incident. This course presents an understanding of the various types of maps used in wildland fire control, map scale and use in determining location of wildland fire, topographic maps and how to use them, and be able to perform calculations to determine the size of fire on a map. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 129 INTERAGENCY INCIDENT BUSINESS MANAGEMENT S-260 1.5 Units <br> Grading: Pass/No Pass Option

Class Hours: 27 lecture total
This course of study is designed to teach the basic concepts of fiscal management of wildland fire incidents. It includes correct and fiscally sound personnel and equipment procurement, time recording, and proper documentation. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 130 BASIC AIR OPERATIONS S-270 - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study presents an understanding of the duties and responsibilities of the Facilities Unit Leader in a wildland fire incident. The course presents factors in determining requirements for each facility, layouts of incident facilities and activation of incident facilities. Note: While any student can take this course, for National

Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 131 HELISPOT MANAGER J-272 - . 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study presents the information necessary for the student to be able to function as a Ground Support Unit Leader on a wildland fire incident. The course includes how to implement traffic plan developed by planning section, activating fueling, maintenance, and repair of ground resources, how to requisition maintenance and repair supplies, and how to maintain incident roads. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 132 INTERMEDIATE WILDLAND FIRE BEHAVIOR S-290 - 2 Units

 Class Hours: 36 lecture totalThis course of study presents the information necessary for the student to be able to function as a Supply Unit Leader on a wildland fire incident. This course includes description of the activities of the Supply Unit, what is needed to setup and staff Supply Unit, organization of and staffing the Supply Unit, and demobilization. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 133 INCIDENT COMMANDER EXTENDED ATTACK S-300 - 1 Unit Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as an Incident Commander Type 3 (ICT 3). The course is presented in a lecture/discussion format and supplemented with group exercise. The six instructional units cover: Information Gathering; Planning; Supporting Organization; Operations; Transitioning; and demobilization/Administrative Requirement. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 134 LEADERSHIP \& ORGANIZATONAL DEVELOPMENT - 3 Units

 Class Hours: 27 lecture/81 lab totalThis course of study is designed to provide the experienced wildland firefighter with the communication and supervision skills necessary to perform as a unit leader on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 135 TASK FORCE/STRIKE TEAM LEADER S-330 - 1.5 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture total
A course of study for experienced wildland firefighters single resource or crew boss qualified to undertake the role of the Task Force/Strike Team Leader in the control of wildland fires. This includes utilization of increments of equipment in saving lives and property, and to develop the skills necessary to supervise the various types of equipment in the wildland fire control. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous
education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 136 FIRE SUPPRESSION TACTICS S-336-2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
A course of study that presents the experienced wildland firefighter with the tactics necessary for the safe utilization of resources to control wildland fires. This course covers the review and comparison of tactical assignments with incident objectives, analyzing capabilities of the resources assigned and making work assignments for each resource to accomplish the tactical objectives in an assigned area. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 137 DIVISION/GROUP SUPERVISOR S-339-1 Unit

Grading: Pass/No Pass Option
Class Hours: 24 lecture total
A course of study for Initial Attack Incident Commanders, Task Force/Strike Team Leaders to be able to function as a Division/Group Supervisor on a wildland fire incident. The course defines and differentiates between the division and group supervisor positions, and teaches the difference between the two positions. The relationships of Division/Group Supervisor is contrasted with Strike Team Leader, Task Force Leader, and Initial Attack Incident Commander. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov)

## FTWO 138 INTERMEDIATE AVIATION OPERATIONS S-370 - 2 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study is to provide Incident Commanders and other fire line supervisors with an understanding of the aviation tools and knowledge to effectively use aviation resources safely, effectively and efficiently on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 139 HELIBASE MANAGER S-371 - 2 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture total
A course of study that provides the information necessary for an advanced firefighter/crew boss or helicopter manager to take over the function of a helibase on a wildland fire incident. The course covers reporting to assigned helibase and how to determine if staffing and aircraft needs are satisfactory, properly review and implement helibase checklist, identify problems that may necessitate a safety briefing and coordination with Air Support Group Supervisor and Air Tactical Group Supervisor. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 140 HELICOPTER COORDINATOR J-374-1.5 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study teaches the duties and responsibilities of the Helicopter Coordinator on a wildland incident. The course includes how to determine aircraft (air tankers and helicopters) operating within incident area of assignment, implement air safety requirements and procedures, and coordinate activities with air attack supervisor, air tanker coordinator, air support supervisor, and ground operations personnel. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 141 AIR SUPPORT GROUP SUPERVISOR J-375-1.5 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture total
The Air Support Group Supervisor is primarily responsible for supporting and managing logistical support for helibase and helispot operations. This position identifies resources, supplies dispatched for air support group, requests special air support teams from appropriate sources through logistics section, determines need for assignment of personnel and equipment at each helibase and helispot, and maintains coordination with airbases supporting the incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 142 AIR TANKER COORDINATOR S-376 - 2 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture total
The Air Tanker Coordinator is responsible for coordinating air tanker operations, and is always airborne. Duties include if the restricted air space declaration has been requested through FAA, determine the location of fixed-wing facilities supporting air tanker operations, and determine if all aircraft including air tankers and helicopters operating within incident area of assignment. Survey incident area to determine situation, aircraft hazards, and other potential problems. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 143 AIR TACTICAL GROUP SUPERVISOR S-378-2 Units
Grading: Pass/No Pass Option
Class Hours: 40 lecture total
Air Tactical Group Supervisor is primarily responsible for the coordination of aircraft operations when fixed and/or rotary-wing aircraft are operating on a wildfire. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 144 INTRODUCTION TO WILDLAND FIRE BEHAVIOR CALCULATIONS S-390 - 2 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study teaches the concepts required in calculating wildland fire behavior for safe and effective fire management operations. It includes local and regional fire behavior issues that are critical to wildland firefighting, comparison of the effects of daytime solar radiation and nighttime heat losses from various sources, descriptions of the effects of terrain, vegetation, clouds, and wind on relative humidity, three types of inversions, and description of their effects on wildland fire behavior. The relationship among general, local (convective), 20-foot, and mid-flame winds is presented along with a description of how topography affects fuels and their availability for combustion. Note: While any student can take this
course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 145 INCIDENT COMMANDER S-400-2 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents the duties and functions of the wildland fire Incident Commander. This includes how to set up organizational elements necessary to mitigate the emergency, request additional resources as needed, how to ensure planning meetings are held as necessary, details relating to coordination of staff activity, and how and when to assume command of an incident after the overall situation is reviewed, sufficient information is available to make logical decisions, and takeover coordination can be accomplished. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov)

## FTWO 147 SAFETY OFFICER S-404-2 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents the necessary information that is required for an individual to function as a Safety Officer on a wildland fire incident. This course includes how to make recommendations that will address those risks or hazards with the highest potential for accidents or injury and follow through with those of lesser degree, how to develop and present alternatives, and present issues related to direct intervention to immediately correct a dangerous situation. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 148 STANDARDS FOR SURVIVAL - . 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study presents the introductory information for wildland firefighters on the safety aspects of how to fight fire aggressively but provide for safety first. This course includes information on how to initiate all action based on current and expected fire behavior, how to recognize current weather conditions and obtain forecasts, obtain current information on fire status, and to remain in communication with crew members, your supervisor, and adjoining forces. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 149 HAZMAT AWARENESS FOR FIREFIGHTERS - . 5 Unit

Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study prepares the student to respond to a Haz-Mat incident in a safe and competent manner and be able to function at an operational level. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov)

FTWO 150 COMMAND \& GENERAL STAFF S-420-2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents advanced training for those individuals who will be assigned to the Command and General Staff positions on a wildland fire incident. This course presents topics that will develop the skills and knowledge that are necessary to perform on wildland Type 2 incidents in a command or general staff position, information required to set up organizational elements necessary to mitigate a wildland fire incident, how to request additional resources as needed, and supervision issues related to coordination of staff activity. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 151 LOOK UP, LOOK DOWN, LOOK AROUND S-133 - . 5 Unit Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study is a wildland fire behavior refresher for experienced wildland firefighters. It presents the three principle environmental elements affecting wildland fire behavior, three factors of fuel that affect the start and spread of wildland fire, three factors of weather that affect fuel moisture, how wind affects wildland fire spread, four factors of topography that affect wildland fire behavior, and descriptions of the dangerous conditions that can develop in a box canyon and steep narrow canyons. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 154 OPERATIONS SECTION CHIEF S-430-1 Unit
Grading: Pass/No Pass Option
Class Hours: 24 lecture total
This course of study presents the information necessary to meet the training requirements of the Operations Section Chief. This course presents the information necessary to assess incident assignments and determine immediate needs and actions, a description of the six principles of command and the six basic rules of emergency operations management, delineation of the relationship between General Staff and the Operations Section Chief, and supervision of the operations function. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 155 INCIDENT TRAINING SPECIALIST S-445-1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
A course of study that presents the information needed to organize and implement an incident training program. This course includes how to analyze and prescribe training assignments to fulfill individual development needs of trainees, and to properly document individual trainee performance and the incident training program. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 156 AIR OPERATIONS BRANCH DIRECTOR S-470 - 2.0 Units

Grading: Pass/No Pass Option
Class Hours: 40 lecture total
This course of study presents a detailed study of the ICS Aviation Organization. It includes understanding the latest Regional Aviation Program and direction, the ability to apply the latest aviation tools and equipment used in the suppression of wildfires, application of the principles of safety when using aviation resources, recognition of the importance of following aviation regulation when using call-whenneeded aircraft, and the interaction among the aviation organization on an incident.

Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 157 ADVANCED WILDLAND FIRE BEHAVIOR CALCULATIONS S-490 - 2 Units

Grading: Pass/No Pass Option
Class Hours: 40 lecture total
This course of study is the fourth National Wildfire Coordinating Group course in wildland fire behavior. This course is designed to give state-of-the-art capability to determine inputs for fire behavior determination and in-depth knowledge of interpretations of model outputs. The material presented teaches participants to project fire perimeter growth based on weather predictions and knowledge of fuels and topography. A variety of fire scenarios are presented for participants to make fire behavior calculations and interpretations. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 158 FACILITATIVE INSTRUCTOR M-410 - 2 Units

Class Hours: 40 lecture total (when offered in the Distance Education format, hours will total 112)
This course of study is to provide experienced wildland firefighting personnel with technical competence in fire management and other disciplines to become effective adult education instructors. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov). This course may be offered in a distance education format.

FTWO 160 HAZARDOUS MATERIALS FIRST RESPONDER UPDATE - . 5 Unit Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study prepares the student to respond to a Hazardous Materials incident in a safe and competent manner and be able to function at an operational level. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 161 MEDICAL FIRST RESPONDER UPDATE - . 5 Unit

Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study meets California Code of Regulations Title 22 requirements that all personnel that respond to any emergency incidents must be trained in first aid. Further requirements in California Code of Regulations, Title 22 require an annual refresher course to maintain competency. This course meets these recertification requirements. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWO 162 CAMPBELL PREDICTION SYSTEM - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total
A course of study that provides an understanding of the fuel flammability issue in predicting wildland fire behavior. The course presents information on how to predict fire behavior in wildland fire situations using flammability variations by time and
aspect, learn how to analyze fire situations, to communicate evaluations, and to use logic in making field fire behavior predictions, and to develop the ability to display and communicate the fire potential. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FIRE TECHNOLOGY/WILDLAND FIRE TECHNOLOGY PREVENTION (FTWP)

FTWP 110 PRESCRIBED FIRE FOR BURN BOSSES RX-300 - 3 Units Grading: Pass/No Pass Option
Class Hours: 44 lecture/36 lab total
This course of study identifies the requirements and components for developing burn prescriptions and operational plans. It includes identification of burning techniques that need be applied to meet burn plan requirements, and how to execute the operational plan by meeting local management objectives, smoke dispersal, and visibility objectives within public health standards. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWP 111 INTRODUCTION TO WILDFIRE PREVENTION P-101 - . 5 Unit Grading: Pass/No Pass Option

Class Hours: 9 lecture total
This course of study is to provide the student with an introduction to wildland fire prevention. The role of wildland fire prevention continues to be important in order to mitigate unplanned ignitions, prevent loss of life, and reduce undesirable damages to property and natural resources. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 112 INSPECTING FIRE PRONE PROPERTY P-110 - . 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study is to provide the student who has little or no experience in inspecting property, how to conduct inspections of fire prone property, including houses and surrounding structures in forested or rural areas. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov)

FTWP 113 CALIFORNIA BASIC FIRE PREVENTION P-140 - 2 Units Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents the information necessary for the student to be able to function as a fire prevention technician in the prevention of wildland fires. This course presents the responsibilities of fire prevention personnel, the role of Cooperative Forest Fire Prevention, development of a sign and poster plan, interagency cooperation, the role of the National Fire Danger Rating System and fire prevention, and how to conduct inspections of residential and commercial operations. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 114 WILDFIRE ORIGIN AND CAUSE DETERMINATION P-151 1.5 Units

Grading: Pass/No Pass Option
Class Hours: 18 lecture/27 lab total
This course of study presents the information necessary for the student to be able to conduct a wildland fire investigation. This course includes how to identify and collect equipment and supplies to conduct a wildfire investigation, record information about the fire, determine the origin of the fire, determine the cause of the fire, properly collect and preserve evidence, interview witnesses and obtain suspect information, prepare and write reports, and how to present testimony before a judge and/or jury. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 115 INTRODUCTION TO INCIDENT INFORMATION S-203 - 2 Units Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study provides the introductory information necessary for the student to be able to function as a Public Information Officer on a non-complex wildland fire. This course includes a description of the duties and responsibilities of a Type 3 Information Officer, the kinds and sources of information needed, how to gather and distribute information to meet the needs of print and electronic media, internal audiences, cooperators, communities, landowners, homeowners, local government leaders, and the steps and materials needed to operate an information center and field work site. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWP 117 INTERMEDIATE FIRE PREVENTION P-240 - 2 Units

Grading: Pass/No Pass Option

## Class Hours: 36 lecture total

This course of study presents additional wildland fire prevention information required for the fire prevention technician. The materials presented include application of federal and state fire laws, an overview of national and regional fire prevention programs and their focus for the future, and an overview of fire prevention planning and its significant components at district and forest level. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov)

## FTWP 120 WILDLAND FIRE PREVENTION PLANNING P-301 - 2 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study is designed for fire managers, fire prevention specialists and planners, and other persons who have fire prevention planning responsibility. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 121 WILDLAND FIRE PREVENTION MARKETING P-303 - 2 Units Grading: Pass/No Pass Option

## Class Hours: 36 lecture total

This course of study is designed to provide the field Fire Prevention Specialist with the necessary tools to develop a wildfire prevention-marketing plan. It includes methods to generate ideas and provide information to assist in the development of a successful wildfire prevention-marketing program. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service

NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 122 ADVANCED FIRE PREVENTION P-340-2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents advanced techniques for the wildland fire prevention officer. It includes a definition of fire's role in ecosystem management, application of the principles of ecology, sociology, economics, communications, and marketing, to the development and implementation of a fire protection plan, and demonstrate how to gain support for the fire protection plan from management and adjacent landowners. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 123 INTRO. TO FIRE EFFECTS RX-340-2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents an understanding of land use activity and controlled fire situations. This course includes a description of fire as an ecological process, applications and limitations of fire use, first order fire effects and how to measure them, and the interaction of fire characteristics on natural and cultural resources components that determines first order fire effects. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FTWP 124 INFORMATION OFFICER S-403 - 2 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents the information necessary for the student to be able to function as an Information Officer in a wildland fire. The course includes news release issues, inquiries from media, participate in briefings, meetings, special sessions as a member of the incident management team, and prepare and disseminate information internally to personnel on incident and appropriate agency offices. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 126 SMOKE MANAGEMENT TECHNIQUES RX-410-2 Units Grading: Pass/No Pass Option

## Class Hours: 36 lecture total

This course of study is for experienced Prescribed Fire Managers and Prescribed Fire Behavior Analysts, and presents in detail the legal, professional, and ethical reasons for managing smoke. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

## FIRST AID/CPR/EMT (FAID)

FAID 130 PUBLIC SAFETY FIRST AID (EMS) - 1 Unit
Class Hours: 9 lecture/27 lab total
This course meets Public Safety Training Standards covered by the U.S. Department of Transportation and is recognized by the local EMS Agency.

FAID 132 EMERGENCY MEDICAL RESPONDER (EMR) - 2 Units
Class Hours: 27 lecture/27 lab total
This course teaches techniques in emergency medical care for the First Responder, which includes Automatic External Defibrillator training. This course also meets Public Safety Training Standards covered by the U.S. Department of Transportation curriculum and approved by the local EMS agency. Note: Students must make application through NorCal E.M.S. for certification.

FAID 133 CERTIFICATION CPR FOR THE PROFESSIONAL RESCUER . 5 Unit
Grading: Pass/No Pass Option
Note: Meets criteria for either the American Red Cross or American Heart Assoc. Class Hours: 9 lecture total
This course will cover CPR and how to treat for foreign body obstruction in adults, children, and infants. Designed for the professional rescuer. Upon successful completion of this course, students may apply to be certified in CPR by the agency having jurisdiction.

FAID 134 RECERT. CPR FOR THE PROFESSIONAL RESCUER - . 5 Unit Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course will cover CPR and how to treat for foreign body obstruction in adults, children, and infants. Designed for the professional rescuer who needs recertification. Upon successful completion of this course, students may apply to be re-certified in CPR by the agency having jurisdiction. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of paid or volunteer employment.

FAID 175 EMERGENCY MEDICAL TECHNICIAN 1 BASIC - 5 Units*
*Effective Spring 2013. Fall 2012 will be 3.5 Units; 42 lecture/82 lab hours (Change made to online catalog on 7/12/12)
Prerequisite: A grade of C or higher in FAID 133, Certification CPR for the Professional Rescuer or any course equivalent to the 2005 American Heart Association's Guidelines for Cardio Pulmonary Resuscitation and Emergency Cardio Vascular Care at the Healthcare Provider Level. Contact Fire Technology Program for questions.
Notes:

1. Ten hours of clinical experience at a hospital emergency room or on an ambulance or an authorized rescue squad will be required. Some providers in the area have requirements for participation in ambulance observation time. American Medical Response requires proof of a current TB skin test, Hepatitis B vaccination, or declination. A proof of vaccination, past history of or titer for MMR. Proof of Tetanus vaccination less than ten years old and either a past history of or a titer for Varicella (Chicken Pox). Check with the instructor for details.
2. State certification as an EMT requires that the student is at least 18 years old, has a current "Healthcare provider" CPR card or "CPR for the Professional Rescuer" card, passes a recognized EMT course, has not been convicted of specific crimes, and completes the statewide written and skills examination. (As of $1 / 1 / 2006$ the state has adopted the National Registry EMT exam as its statewide exam. Upon successful completion of the statewide exam, the student must submit an application to the Local EMS Agency (Northern California Emergency Medical Services) for certification, which is valid statewide).
3. This class meets for additional time "outside" of the scheduled weekly meeting time. This may include Saturdays, Sundays or night shifts.
4. State regulations require the EMT students possess CPR training equivalent to the 2005 American Heart Association's Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care at the Healthcare Provider level as a prerequisite for admission to an EMT-1 basic course.
5. Students are required to purchase nitrate gloves, 1-way pocket mask valve and a Shasta College EMT Program student photo ID card.
6. Students wishing to participate in clinical observations at certain healthcare facilities must submit proof of a drug screening and a background check through a Shasta College approved vendor prior to going into clinical facilities. Shasta college personnel must review and approve test results prior to students participating in clinical observations.
Class Hours: 58 lecture/109 lab (includes 64 hours of skills training and 18 hours auto extrication)
An intensive course to assist the student with developing skill in recognition of symptoms of illness and injuries, and proper procedures in emergency care. Upon successful completion of the course, the student must make application through Northern California Emergency Medical Services, Inc., for certification.

FAID 178 EMT 1 BASIC RECERTIFICATION (form. FAID 178AD) - 1 Unit Class Hours: 18 lecture/14 lab total
A comprehensive review of signs and symptoms of illness and traumatic injuries. Skills necessary to provide immediate temporary care of such victims are also reviewed. Course is approved by Northern California Emergency Medical Services, Inc. and Sierra-Sacramento Valley EMSA for the purpose of EMT recertification. Upon successful completion of the course, the student may make application through Northern California Emergency Medical Services, Inc.(Trinity County only), and Sierra-Sacramento Valley EMSA (Shasta \& Tehama Counties only) for recertification. Note: This course may also be taken to satisfy the requirements for recertification as a first responder. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FAID 197 SPECIAL TOPICS IN FIRST AID/CPR/EMT - .5-2 Units
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in first aid/CPR/EMT. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

FAID 198 SPECIAL SKILLS TOPICS IN FIRST AID/CPR/EMT - .5-2 Units Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in first aid/CPR/EMT. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

FRENCH (FREN)
Two years of high school foreign language with grades of "C" or better is equivalent to one semester of foreign language at Shasta College.

FREN 1 ELEMENTARY FRENCH - 5 Units
Grading: Pass/No Pass Option
Class Hours: 90 lecture total
This introductory course is designed to give the student intense practice in speaking and listening to French, and reading and writing in French, with additional emphasis on grammar and pronunciation. The class will focus on communication relating to daily life and routine activities, such as people and places, family life, weather, leisure-time activities, and the foods we eat. Also, students are introduced to the culture of French-speaking people.

## FREN 2 ELEMENTARY FRENCH - 5 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in FREN 1 or Foreign Language Placement Level 2 or higher
Class Hours: 90 lecture total
In this continuation of Elementary French, there is continued emphasis on listening to oral French and on speaking the language, along with writing and reading French. Students expand their language skills and vocabulary, improving their ability to ask and answer questions, to discuss daily life, events in the past or present, travel, leisure-time activities and shopping. Students will read short texts about French history and culture, as well as watch videos about French-speaking countries.

FREN 3 INTERMEDIATE FRENCH - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of $C$ or higher in FREN 2, or Foreign Language Placement Level 3 or higher
Class Hours: 54 lecture total
A thorough review of basic communication skills (speaking, listening, reading, and writing) and formal study of the patterns of French. Students continue to strengthen their speaking skills as they work toward mastery of the language. The course includes reading expository writing along with pieces of French literature.

FREN 4 INTERMEDIATE FRENCH - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in FREN 3 or Foreign Language Placement Level 4 or higher
Class Hours: 54 lecture total
The fourth semester of the language emphasizes conversation, contemporary literature, French culture and composition. Reading selections include poetry, theatre, and journalistic expressions.

## GEOGRAPHIC INFORMATION SYSTEMS (GIS)

## GIS 1 SURVEY OF DIGITAL MAPPING - 1 Unit

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in CIS 1, or demonstrated general computer literacy Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
This course is a survey of digital mapping technologies, focusing on consumer and commercial applications. Such technologies, also known as geospatial technologies, are increasingly used by average citizens as well as business, government and non-profit organizations. Students will learn underlying concepts that will help to understand the broader utility and potential of digital mapping technologies, including general concepts related geographic information systems (GIS), global positioning systems (GPS), and satellite imagery. Internet applications such as Google Earth and ArcGIS Online will be utilized to explore digital mapping technologies. This course may be offered in a distance learning format.

GIS 10 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS 3 Units (formerly NR 84)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in CIS 1, or demonstrated general computer literacy Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
Geographic information systems (GIS) are used in a range of fields including urban planning, public health, natural resource management, and emergency response. This course will introduce students to fundamental capabilities of GIS, along with the underlying conceptual framework. Students will learn about the essential qualities of GIS data, including spatial and attribute characteristics. Essential procedures for accessing, updating, and summarizing attribute tables will be undertaken. Students will work with different GIS data formats and their integration through georeferencing. Students will produce effective and well designed map layouts. Basic analysis through the use of queries and overlays will also be covered. ArcGIS software will be used for the course. This course may be offered in distance education format.

## GIS 20 SPATIAL DATABASES - 1 Unit

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in GIS 10
Class Hours: 9 lecture/27 lab total (when offered in the Distance Education format, hours will total 54)
This course covers database principals, structure and processes as they apply to geographic information systems (GIS). Data management is a critical aspect of GIS. Students will work with various data to learn database fundamentals such as design, indexing, access, and reports. Integration of non-spatial data with GIS data will be a key component of the course. Students will also explore the use of the ArcGIS geodatabase. Microsoft Access and ArcGIS software will be used in the course. This course may be offered in a distance education format.

## GIS 21 GIS-CAD INTEGRATION - 1 Unit

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in GIS 10 or working experience with CAD or GIS Class Hours: 9 lecture/27 lab total (when offered in the Distance Education format, hours will total 54)
This course covers computer-aided drafting (CAD) structure, principles and processes as they apply to geographic information systems (GIS). CAD data management is a critical aspect of GIS. Students will work with various CAD data to learn processing and manipulation techniques for displaying and working with CAD data in a GIS. Preparation and georeferencing of CAD data will be key components of the course. AutoCAD and ArcGIS software will be used in this course. This course may be offered in a distance education format.

## GIS 22 GIS DATA CREATION - 2 Units (formerly GIS 13)

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in GIS 10 and a grade of $C$ or higher in GIS 20 Class Hours: 18 lecture/54 lab total (when offered in the Distance Education format, hours will total 108)
This course explores essential methods for GIS data creation. Students will implement common procedures to meet GIS data creation objectives. Digitizing and editing will be implemented using a variety of software procedures, tools and techniques. Data creation will also be implemented through geocoding of address and coordinate data. Global positioning systems (GPS) technologies for GIS data creation will be undertaken using both mapping-grade and mobile GIS methods. Students will perform pre-planning, field and post-processing procedures for effective GIS data creation. Measures and methods of quality assurance and quality control will be emphasized. This course will use ArcGIS software, along with Trimble GPS hardware and software. Course may be offered in distance education format.

## GIS 23 RASTER GIS - 1 Unit

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in GIS 10 or working experience with GIS
Class Hours: 9 lecture/27 lab total (when offered in the Distance Education format, hours will total 54)
This course provides students skills for access, representation and manipulation of raster data in a range of different formats. Students will learn various methods for the display of raster data. Students will perform manipulation and analysis of grid data sets, such as digital elevation models (DEM). Use of imagery as a foundation GIS dataset will be covered. This course may be offered in a distance education format.

## GIS 24 CUSTOMIZING GIS - 1 Unit

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in GIS 10
Class Hours: 9 lecture/27 lab total (when offered in the Distance Education format, hours will total 54)
This course introduces students to customizing GIS applications to improve efficiency for specific editing and data manipulation scenarios. Several methods for customizing ArcGIS will be introduced including loading pre-built third party tools, creating custom toolbars, custom buttons, geoprocessing toolboxes, geoprocessing models, along with a brief introduction to writing scripts. The course will briefly introduce the students to programming ArcObjects with VBA and Python for programming scripts. This course may be offered in a distance education format.

## GIS 25 GIS PROJECTS - 1 Unit

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in GIS 10 or working GIS experience
Class Hours: 9 lecture/27 lab total (when offered in the Distance Education format, hours will total 54)
This course provides students with skills in GIS project design, implementation and management. Successful GIS projects require a systematic approach to identification of system objectives, required resources and implementation approach. Acquisition and management of data, along with project documentation, will also be covered. Students will apply these skills through the design and implementation of a project. Projects will be presented to other GIS users. ArcGIS, ArcPad, and ArcIMS will be the primary software used for the course. This course may be offered in a distance education format.

## GIS 94 GEOGRAPHIC INFORMATION SYSTEMS WORKSITE LEARNING -1-8 Units <br> Limitation on Enrollment: Financial aid students must maintain concurrent

 enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## GIS 97 SPECIAL TOPICS IN GEOGRAPHIC INFO. SYSTEMS (GIS) -

 1-4 UnitsGrading: Pass/No Pass Option
Class Hours: 18 lecture hours per unit
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in Geographic Information Systems (GIS). A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. This course may be repeated three times for a total of four enrollments since subject matter varies.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## GEOGRAPHY (GEOG)

GEOG 1A PHYSICAL GEOGRAPHY- 3 Units
Class Hours: 54 lecture total
This course explores Earth's physical systems, their dynamic processes, and surface expressions. Topics include weather, climate, hydrology, tectonics, geomorphology, and the biosphere. Attention is given to spatial patterns and impacts of human activities.

## GEOG 1AL PHYSICAL GEOGRAPHY LAB - 1 Unit

Grading: Pass/No Pass Option
Corequisite: GEOG 1A
Class Hours: 54 lab total
This course explores Earth's physical systems, through lab and field activities. Scientific method of inquiry is employed to the interpretation of climate, landforms, water, and living communities. Scientific data will be collected, displayed, and interpreted, for a range of Earth processes and formations. Students will use map products to make observations, take geographic measurements, and interpret phenomena, Students will also interpret physical phenomena, such as temperature, pressure, and humidity as they relate to geographic location.

## GEOG 1B CULTURAL GEOGRAPHY - 3 Units

Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total
This course examines the relationships among world cultures in order to investigate population, religion, language, and other societal characteristics. It also analyzes spatial differences among cultures including housing types, family usage of space within the house, and city planning. The role that physical geography plays in determining cultural attitudes and the influence that cultural geography has on the natural ecology are also discussed.

GEOG 2A FIELD GEOGRAPHY (PHYSICAL) - 1 Unit
Grading: Pass/No Pass Option
Note: Field excursions will vary throughout California, Southern Oregon and Western Nevada over a three-day weekend or over a series of three Saturdays. Class Hours: 9 lecture/27 lab total
Field observation of physical processes and formations are essential to the study of geography. Landforms, water resources, erosion hazards, soil conditions, and vegetation patterns are among the topics that illustrate the interactions between humans and the environment. Each course offering will emphasize a particular topic in physical geography, with unique field sites selected to demonstrate the topics in question. Students will be exposed to a range of field techniques including sampling and the use of various types of measurement equipment. Field excursions will vary throughout California, Southern Oregon and Western Nevada over a three-day weekend or over a series of three Saturdays. Students will also attend three 3-hour lecture sessions. Additional field trip fees for lodging, entrance fees and related items will be specified in the course schedule.

## GEOG 2B FIELD GEOGRAPHY (CULTURAL) - 1 Unit

Grading: Pass/No Pass Option
Note: Field excursions will vary throughout California, Southern Oregon and Western Nevada over a three-day weekend or over a series of three Saturdays. Class Hours: 9 Lecture/27 Lab total
Field observation and analysis of human landscapes is essential to the student cultural geography. Topics including land-use patterns, economic and transportation systems, wealth disparities, cultural practices and historical legacies will be explored in the field. Each course offering will emphasize a particular topic in cultural geography, with unique field sites selected to demonstrate the topic in question. Students will be exposed to field techniques including note taking, interviews, field mapping, and document research. Field excursions will vary throughout California, Southern Oregon and Western Nevada over a three-day weekend or over a series of three Saturdays. Students will also attend three 3-hour lecture sessions. Additional trip fees for lodging, entrance fees and related items will be specified in the course schedule.

## GEOG 5 DIGITAL PLANET - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance education format, hours will total 162)
This course will explore the technologies and the societal implications of our digital planet. Specific attention is given to geospatial technologies which provide locational services, imagery, mapping and other capabilities. In addition to use in industry, government, and non-profit sectors, these technologies are also common on mobile devices and in Internet applications. Investigation of issues related to society, population, and geo-politics will be undertaken using a variety of Internet-based technologies that are ideally suited to analyzing sociological data and geographic patterns. This course will also consider issues of geographic perception, social justice, equity, privacy, and representational accuracy of our digital planet. This course may be offered in a distance education format.

## GEOG 7 CALIFORNIA GEOGRAPHY - 3 Units

Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance education format, hours will total 162)
This course provides an introduction to California's diversified geography including climate, landforms, natural vegetation, and mineral and water resources. The cultural landscapes of ethnic diversity, our Native American past, urban and agricultural regions and the economic challenges of the future are also examined. California Geography examines these topics, their spatial distributions and their impact on the environment. Class includes a Saturday field trip; Internet offering includes a virtual field trip. This course may be offered in a distance education format.

## GEOG 8 WORLD REGIONAL GEOGRAPHY - 3 Units

Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course will introduce students to the world's major geographic regions. This course will increase student awareness of geographic concepts by examining the physical, cultural, economic and political characteristics of the major realms of the world through the unifying concept of the geographic region. This course will illustrate the importance of the world's geographic regions and how they interrelate. The location of important geographic features such as mountain ranges, rivers, countries, and major cities will be an important part of the course. This course may be offered in a distance education format.

GEOG 11 MAP PRINCIPLES - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
This course will cover essential map principles. A variety of different types of maps and their uses will be explored, along with methods of data collection and representation employed. Students will explore the concept of map scale and its applicability to using maps for measurement. Map projections, coordinate systems, and datums will be explored with respect to their effective use and potential pitfalls. Map abstraction, symbology, and cartographic principles will be covered as well. This course may be offered in a distance education format.

## GEOLOGY

See Earth Science - ESCI

## GERMAN (GERM)

Two years of high school foreign language with grades of "C" or better is equivalent to one semester of foreign language at Shasta College.

GERM 1 ELEMENTARY GERMAN - 5 Units
Grading: Pass/No Pass Option
Class Hours: 90 lecture total
This course is designed to give the student training in spoken German at a basic level, including some reading, writing, and much speaking. Students gain aural comprehension level of German through basic conversation and listening skill development. Customs and culture are also emphasized.

## GERM 2 ELEMENTARY GERMAN - 5 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in GERM 1, or Foreign Language Placement Level 2 or higher
Class Hours: 90 lecture total
This course takes the student on to a more proficient level of German. Comprehension and speaking levels are increased through participation in many oral activities (role playing, skits, plays, etc). Further information on culture and traditions are provided, including information regarding Germany's position in the world today.

## GERM 3 INTERMEDIATE GERMAN - 3 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in GERM 2 or Foreign Language Placement Level 3 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
This course is designed to give the student advanced training in German pronunciation, essentials of German grammar, reading, writing and speaking. Composition and literature are introduced. The student also learns about customs and culture of German-speaking people.

GERM 4 INTERMEDIATE GERMAN - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of $C$ or higher in GERM 3 or Foreign Language Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
This course builds on the higher language skills acquired in GERM 3 with greater emphasis on the linguistic diversity of the language. Emphasis is placed on a more extensive study of composition and conversation together with greater stress on extensive reading in German literature.

## HEALTH (HLTH)

HLTH 1 HEALTH AND WELLNESS - 3 Units (formerly PE 1, HPE 11)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course focuses upon those elements of human behavior which influence the health status of both the individual and the community. Topics include personal fitness, nutrition, sexuality, sexually transmitted disease, drug dependence including alcohol and tobacco. Also included are topics dealing with lifestyle disease, especially cancer, cardiovascular disease and lung disease.

HLTH 2 NUTRITION AND FITNESS - 3 Units (formerly PE 2, HPE 7)
Grading: Pass/No Pass Option
Class Hours: 54 lecture
Analysis and evaluation of current practices and theories regarding nutrition and exercise, and their relationship to weight control and physical fitness. Each student will learn to prepare an individual physical assessment, exercise prescription and nutritional analysis to promote optimum healthful living.

HLTH 3 SUBSTANCE ABUSE AWARENESS - 3 Units (formerly PE 3, HPE 57)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
An introductory course for individuals who wish to increase their knowledge and understanding of substance abuse and chemical addiction. This course will introduce students to a variety of substances that can become abused and can lead to addiction. The substances covered in this course include: Tobacco (including smokeless tobacco), alcohol, street/recreational drugs, performance enhancing drugs, and sexual stimulants. Information will focus on the physical and societal affects of the misuse and abuse of these substances and methods that can lead to the control and/or elimination of use of these substances.

## HLTH 10 BEGINNING ATHLETIC TRAINING - 3 Units <br> (formerly PEAT 1, HPE 91)

Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Theory and practice in care and prevention of athletic injuries. Course will cover basic injury prevention, recognition, emergency care and treatment of injuries. Students will have the opportunity to become certified in an American Red Cross "Sport Safety Training" course.

## HEALTH OCCUPATIONS (HEOC)

See Also: REGN, and VOCN
HEOC 10 APPLIED PHARMACOLOGY - 3 Units (formerly HEOC 197)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
HEOC 10 is designed to introduce the principles of applied pharmacology to the current or prospective nursing and allied health student. Students will explore the names, classifications, actions, uses, side effects, pharmacokinetics, pharmacodynamics, contraindications, and drug to drug interactions of medications presented using a body systems approach. Implications for medication administration are discussed using a case study approach. Topical pharmacological issues will be discussed. Additionally, students will learn how to use a drug guide to gain basic knowledge about medications and to prepare patient drug education plans. his course may be offered in a distance learning format.

HEOC 94 HEALTH OCCUPATIONS WORKSITE LEARNING - 1-8 Units Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

HEOC 100 PREPARING FOR A NURSING CAREER - 2 Units
Class Hours: 36 Lecture total (when offered in the Distance Education format, hours will total 108)
This course presents the role of the Associate Degree Nurse and the Vocational Nurse within various healthcare settings. Students will assess their own learning styles and compare their abilities to those required in nursing. Critical thinking skills will be introduced and applied to various scenarios using the knowledge base acquired from prerequisite courses and life experiences. Written, verbal, and math skills will be emphasized, along with exercises in examination, presentation, and interview skills. Learning resources, study strategies and stress management will be addressed to prepare the Associate Degree Nursing and Vocational Nursing candidate for the rigors of being a nursing student. This course may be offered in a distance learning format.

## HEOC 160 STRESS MANAGEMENT - 2 Units (formerly HEOC 185)

Class Hours: 36 lecture total
This class is designed to teach students the skills needed to recognize that all stressors affecting our actions are driven by our beliefs and values and how they affect the choices we make in dealing with stress. It will provide students with the opportunity to practice a variety of coping techniques that will assist them in making their lives less stressful. These techniques will include relaxation, the development of a support system, effective communication and listening. Students will gain the knowledge necessary to recognize their uniqueness and the importance of developing their personal power. Upon completion of this course, students will have the skills necessary to know how choices affect the quality of their lives and how to bring about positive life-style change.

## HEOC 180 NURSE AIDE/HOME HEALTH AIDE - 13 Units

Limitation on Enrollment: Students must meet health and safety clinical requirements. See www.shastacollege.edu/HSUP/NA-HHA/generalinformation or call 530-339-3600 for detailed information on requirements.
Note: All students enrolling in a NA/HHA Program must be fingerprinted and cleared of all criminal convictions before they can be certified.
Class Hours: 144 lecture/288 clinical total
Course is designed to prepare students to perform the basic nursing skills required in acute hospitals, long-term care facilities, and home health agencies. Special emphasis is placed on health care provisions and modifications in the community health care settings. The State Department of Health Services approves this course, and certificates will be issued upon successful completion of the course. Students are then eligible to apply for the state competency examination for certification.

HEOC 181 NURSE AIDE - 9 Units
Limitation on Enrollment: Students must meet health and safety clinical requirements. See www.shastacollege.edu/HSUP/NA-HHA/generalinformation or call 530-339-3600 for detailed information on requirements.
Note: All students enrolling in a NA Program must be fingerprinted and cleared of all criminal convictions before they can be certified.
Class Hours: 96 lecture/192 clinical total
This course is designed to prepare students to perform the basic skills required of a nurse aide. Course content consists of theory, laboratory, and clinical experience in long term care facilities. The course is approved by the State Department of Health Services. A certificate will be issued upon successful completion of the course. Students are then eligible to apply for the state competency examination for certification.

HEOC 192 PERIOPERATIVE NURSING - 3 Units
Limitation on Enrollment: Valid California RN license
Class Hours: 18 lecture/ 108 lab total
This course is designed to provide the licensed RN with an introduction to both the theory and clinical aspects of the perioperative nursing role. Theory will cover a range of topics from exploring the surgical setting to professionalism and ethics in the perioperative environment. Each student will arrange a clinical rotation in an approved OR to experience the various aspects of the RN's role in the perioperative environment. This course is designed to provide the licensed $R N$ with a limited OR experience to allow them to explore the field of OR nursing and to provide an opportunity to move into the field of OR nursing.

## HEOC 196 SPECIAL TOPICS IN HEALTH OCCUPATIONS THEORY -

 .5-3 UnitsGrading: Pass/No Pass Option
Advisory: May advise certain clinical experience or length of time working as a nurse depending upon the course
Class Hours: 9-54 lecture total
This course is designed to give students an opportunity to explore a variety of topics and concepts not covered in other Health Occupations courses. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## HEOC 198 SPECIAL TOPICS IN HEALTH OCCUPATIONS CLINICAL -.5-3 Units

Grading: Pass/No Pass Option
Advisory: May advise certain clinical experience or length of time working as a nurse depending upon the course
Class Hours: 27-162 lecture total
This course is designed to give students an opportunity to explore a variety of topics and concepts not covered in other Health Occupations courses. As a lab course it will also offer the opportunity for clinical exploration of various health occupations careers. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## HISTORY (HIST)

## HIST 1A HISTORY OF WESTERN CIVILIZATION - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A survey of the origins and development of civilization in the western world from prehistory to 1600 , with special emphasis on institutions, thought, and culture. The course is designed to show the continuity of western civilization and to overview the heritage of the present generation. This course may be offered in a distance education format

HIST 1B HISTORY OF WESTERN CIVILIZATION - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A survey of the development of civilization in the western world from 1600 to the present, with special emphasis on institutions, thought, and culture. The course is designed to show the continuity of western civilization and to explore the heritage of the present generation. This course may be offered in a distance education format.

## HIST 2 WORLD CIVILIZATION TO 1500 C.E. - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A comparative survey of the major ancient world civilizations which developed between 3500 B.C.E. and 1500 C.E. Political institutions, religious ideologies, rise and fall of empires and the major cultural innovations of each of the major world civilizations will be considered. This course may be offered in a distance education format.

HIST 3 WORLD CIVILIZATION: 1500 to Present $\mathbf{- 3}$ Units
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A survey of the development of the major civilizations of the world from 1500 to the present. The focus is on the political, economic, social, intellectual and religious forces present in the rise of Africa, the Americas, Asia and Europe from 1500 to the present day. The study of the dynamic interaction of peoples and cultures will give a multi-perspective view of world history. This course may be offered in a distance education format.

HIST 17A UNITED STATES HISTORY - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is a survey of the history of the United States from Pre-Columbian Peoples to the end of Reconstruction. Topics include contact and settlement of America, the movement toward independence, the formation of a new nation and Constitution, westward expansion and manifest destiny, the causes and consequences of the Civil War, and Reconstruction. This course satisfies the CSU requirement for US History (US-1). This course may be offered in a distance education format.

## HIST 17B UNITED STATES HISTORY - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher; or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is a survey of the history of the United States from 1877 to the present. The course covers the rise of industrialization, the expansion of America into world affairs, the causes and results of the Great Depression, the world wars of the $20^{\text {th }}$ century, the Cold War, and post-9/11 America. This course satisfies the CSU requirement for US History (US-1). This course may be offered in a distance education format.

## HIST 25 AFRICAN AMERICAN HISTORY - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is a survey of the historical development and contributions of African Americans in the United States. Topics include African civilizations, the African slave trade and Diaspora, the development of African American culture, colonial and Antebellum slavery, Emancipation and Reconstruction, Jim Crow, the Harlem Renaissance, civil rights, African Americans at war, and the concepts of race, ethnicity, race relations, and social activism. This course may be offered in a distance education format.

## HIST 35 HISTORY OF MEXICAN AMERICANS - 3 Units

Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total
This course traces the cultural, economic, literary, and political history of the Mexican and Mexican American in the U.S. up to the present. Focus will be on the development and nature of Mexican and Chicano culture and the Chicano movement, emphasizing especially significant historical movements and their
contribution to understanding current cultural problems. Socioeconomic and political forces that shaped U.S. policies and practices in relation to the Mexican immigrant and Mexican Americans will be developed.

## HIST 36 HISTORY OF THE FAR EAST - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total
An introduction to the contemporary Far East. Designed primarily for the student who has had no previous contact with the region. Survey of the people, cultures, economics, and current problems, with major emphasis on China and Japan. The majority of the survey deals with events since 1800 .

## HIST 38 HISTORY OF WORLD RELIGIONS - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6, or higher or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A course designed to give the student an understanding of the beliefs systems and historical development of the world's religions and an appreciation of the contribution of religion to the cultural heritage in which he lives. This course may be offered in a distance education format.

HIST 40 HISTORY AND GOVERNMENT OF CALIFORNIA - 3 Units Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6, or higher or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A survey of the development of California from the Spanish period to the present day. Emphasis will be placed on contemporary development. The role of government is given particular attention. This course may be offered in a distance education format.

## HIST 55 HISTORY OF THE AMERICAN FRONTIER - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6, or higher or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is designed to cover the aspects of frontier life from 1600 to 1900 in America. The course covers traditional attitudes such as manifest destiny and the Protestant ethic on the frontier, as well as policies of the frontier like the Indian policy after 1830. The course is broken down into eras of frontier movement and examines cultural evolution on the frontier. The course ends with a discussion of the "Wild West", which is post-Civil War and culminates with acquisition of areas beyond the continental United States. This course may be offered in a distance education format.

HIST 57 RUSSIAN HISTORY - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A general survey of the Russian State from the beginning of the Kievan era (1054) to modern Soviet Russia. Included will be an analysis of the cultural, religious, economic, and social institutions of each century. Particular emphasis will be placed on contemporary Soviet Russia. Contributions of individual Russian Leaders will be discussed. This course may be offered in a distance education format.

HIST 178 LOCAL HISTORY OF TEHAMA COUNTY - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
A survey of the history of Tehama County. The course will examine the historical development of the country including the impact of geography, native peoples, economic development as shown in lumbering, agriculture, tourism and manufacturing and the impact and development of transportation including river navigation, roads and highways, railroads and flight. Special topics such as significant individuals, organizations, rise and fall of towns and cities will also be considered.

HORTICULTURE
See AGEH and AGVIT for course listings

## HOSPITALITY (HOSP)

HOSP 10 INTRODUCTION TO THE HOSPITALITY INDUSTRY - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Overview of structure and relationship of components within the hospitality and travel industry. Economic and employment impact and review of food service, lodging, resorts, recreation enterprises, attractions, cruise, destination bureaus, travel agencies and related operations. Focuses on orientation to customer service, cultural/economic trends and career opportunities. This course may be offered in a distance education format.

HOSP 20 HOSPITALITY OPERATIONS MANAGEMENT - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Principles of organization, management, and decision models applied to the tasks and challenges of hospitality operations. Involves techniques of problem solving (including planning, organizing, staffing, directing and controlling operations) in areas of front office operations, housekeeping, personnel and security. The course also examines a systematic approach to front office procedures by detailing the flow of business through a lodging operation beginning with the reservation process and ending with check-out and settlement. This course may be offered in a distance education format.

## HOSP 35 COMPUTER APPLICATIONS IN THE HOSPITALITY INDUSTRY 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Provides an overview of the information needs of lodging properties and food service establishments; addresses essential aspects of computer systems, such as hardware, software, and generic applications; focuses on computer-based property management systems for both front office and back office functions; and focuses on computer-based restaurant management systems for both service-oriented and management-oriented functions. This course may be offered in a distance education format.

## HOSP 40 HUMAN RESOURCE MANAGEMENT IN THE HOSPITALITY INDUSTRY - 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Practical approach to the problems of human resource management in the hospitality industry. Introduction to the personnel function; selection and placement of personnel; the role of supervision with emphasis on induction, training, communications, performance, appraisal, and leadership style. Study of age and salary administration; motivation; and discussion of union-management relations. This course may be offered in a distance education format.

HOSP 45 RESTAURANTS, HOTELS, AND LAWFUL MANAGEMENT - 2 Units Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 108)
This course explores potential legal issues and pitfalls that might impact the hospitality industry. The course covers legislation, such as the Civil Rights Act of 1991 and other federal discrimination laws dealing with employment and sexual harassment, Occupational Safety and Health Administration (OSHA) regulations, the Family and Medical Leave Act of 1993, the Americans with Disabilities Act, the Hotel and Motel Fire Safety Act of 1990, antitrust regulations, the National Labor Relations Act, copyright music laws, tax laws, tip reporting regulations, telephone resale regulations, consumer protection laws, franchise regulations, and product liability laws. This course is not intended to make the student a legal expert on the subject reviewed nor is it intended to be a substitute for the services or legal opinion of an attorney. Students will, however, be better able to recognize potential legal problems or potential lawsuits, which will assist them when consulting with an attorney on strategies to prevent legal issues from becoming more serious in their hospitality organization. This course may be offered in a distance education format.

HOSP 50 HOSPITALITY MARKETING, SALES AND ADVERTISING -3 Units Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Application of marketing principles and techniques in the hospitality industry. Emphasis on developing an understanding of consumers and using that knowledge to provide value and create consumer satisfaction while meeting financial goals. This course will also focus on practical sales techniques, proven approaches to selling to targeted markets, and advertising's role in sales. This course may be offered in a distance education format.

HOSP 60 HOSPITALITY AND FINANCIAL MANAGEMENT - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course focuses on the generation and analysis of quantitative information for the purpose of planning, control and decision-making by managers at various levels in hospitality industry operation. Emphasis is placed on the need for and use of timely and relevant information as a vital tool in the management process. Also examines accounting functions to support hospitality management analysis. Special attention on: internal controls, cost-volume profit relationships, relevant costs for special decisions, flexible budgets, profit centers and tax implications of decisions. This course may be offered in a distance education format.

HOSP 65 HOSPITALITY SUPERVISION - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture (when offered in the Distance Education format, hours will total 162)
This course offers insight into the various aspects of supervision in the hospitality industry. Supervisory roles, responsibilities, and essential managerial skills shall be discussed. The goal of the course is to equip students with the necessary authoritative and decision-making skills to be used in the workplace. This course may be offered in a distance education format.

## HOSP 94 HOSPITALITY WORKSITE LEARNING - 1-8 Units

Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

HOSP 97 SPECIAL TOPICS IN HOSPITALITY - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in hospitality. A different topics will be addressed each time the class is taught and will be listed in the schedule of classes. Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

HOSP 98 SPECIAL LAB TOPICS IN HOSPITALITY - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in hospitality. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## HUMANITIES (HUM)

A series of interdisciplinary courses designed to meet Humanities General Education requirements for Transfer and the Associate in Arts Degree. Courses in the Fine Arts, Literature and Philosophy also meet this requirement. See a complete listing of courses in the current College class schedule.

## HUM 2 EXPLORING THE HUMANITIES - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is designed to explore the humanities by examining expression of human values, ideas, concerns, and experience through the arts, literature, media and the social sciences. The reading of important works in the humanities, written analysis, and attendance at selected performances are major requirements of this course. This course may be offered in a distance education format.

HUM 4 HUMANITIES THROUGH THE FILM - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
An examination of the motion picture as an art form. Films from the silent era through contemporary works will be examined in order to analyze and appreciate them from philosophical, historical, literary, aesthetic and cultural perspectives.

HUM 70 EXPLORING CONTEMPORARY TELEVISION - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is designed to explore the effect that television has had on contemporary culture, with regard to language, art, history, and aesthetics. The changing content of the television medium and its influence on society will be examined through the humanities perspective. This course may be offered in a distance education format.

## HUM 304 ADVENTURES IN THE PERFORMING ARTS - 0 Units

Class Hours: 3-54 lecture total
Informal explorations of personalities, works and major themes in symphonic and chamber music, opera, modern drama, the American musical, and films, designed to promote increased personal appreciation and enjoyment of these forms of artistic expression.

## INDEPENDENT STUDY (IS)

## IS 99/199 INDEPENDENT STUDY - .5-3 Units

Class Hours: 27 hours for each $1 / 2$ unit
Independent study provides a forum for advanced work in a given field of study. A student may contract with a full-time instructor to do independent study in a specific subject area in which he/she has exhausted the regular curricular offerings. For transfer level courses, the student must have a declared major or already possess a degree and have completed a minimum of 12 transfer units at Shasta College. For non-transfer level courses, the student has completed a minimum of 12 units at Shasta College. Note: Any combination of these courses may be repeated three times for a total of four enrollments or a maximum of six independent study units.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## INDUSTRIAL TECHNOLOGY (INDE)

INDE 1 CAREER PLANNING FOR INDUSTRIAL TECHNOLOGY - 1 Unit Class Hours: 18 lecture total
Career opportunities and training requirements in automotive, heavy duty diesel and welding will be examined. Students will be assisted in identifying career opportunities and developing career goals. This class is required of all auto, diesel, and welding majors.

## INDE 101 INDUSTRIAL TRADE BASICS - 3 Units

Class Hours: 54 lecture total
The course provides an overview of basic skills required for individuals seeking entry-level employment in industrial occupations. The subjects covered include workplace safety and regulations, hand and power tools, basic rigging, introduction to blueprints, and an overview of soft skills related to effective communications and employability requirements necessary for sustainable employment.

## INDE 102 INDUSTRIAL TRADE ESSENTIALS - 3 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab tota
The course provides an overview to fundamental industrial mechanical concepts, principles and equipment. The subjects covered include precision measurement, print reading, hydraulics/pneumatics, lubrication, bearings, flexible belt/mechanical drives and an introduction to basic electricity.

INDE 105 UNIVERSAL TROUBLESHOOTING PROCESS - 3 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab
This course provides techniques and procedures to systematically approach and resolve problems/malfunctions associated with a variety of operational systems related to electronic, hydraulic, and mechanical industrial applications.

## INDE 138 FUNDAMENTALS OF ELECTRONICS AND ELECTRICITY - 3 Units

 (formerly ELEC 138, ELEC 138/139)Advisory: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher, and a grade of C or higher in ENGL 270 or English Placement Level 4 or higher Class Hours: 36 lecture/54 lab total
This course is designed for students who wish to be introduced to the basic principles of electronics and electricity for various vocational and industrial applications. Topics include basic theory of DC and AC circuits, semiconductor theory, digital concepts, circuits and systems and their applications.

## INDE 150 INTRODUCTION TO ENGINE MACHINING - 3 Units (formerly AUTO 150) <br> Class Hours: 54 lecture total

This course is designed to introduce the student to the basic fundamentals of the internal combustion engine. The subjects will cover the operation and design of varied engine systems and the repair and rebuilding of these engines.

INDE 152 ENGINE MACHINING LABORATORY - 3 Units (form. AUTO 152) Corequisite: Students must be concurrently enrolled in, or have completed INDE 150 with a grade of C or higher
Class Hours: 162 lab total
This course will introduce the student and provide instruction in the disassembly, cleaning and inspection of the internal combustion engine. The student will be orientated in the use of general and specialty tools used in the rebuilding of internal combustion engines. ASE and AERA based tasks utilize hand and power tools and modern machining equipment. Completion of this course along with INDE 150 will prepare students to become certified in ASE areas $\mathrm{A}-1, \mathrm{M}-1, \mathrm{M}-2$ and $\mathrm{M}-3$.

INDE 180 ENGINE MACHINIST I-4 Units (formerly AUTO 180, AUTO 180A) Prerequisite: A grade of $C$ or higher in INDE 150 and INDE 152, or a grade of $C$ or higher in DIES 164
Note: Basic hand tools required
Class Hours: 36 lecture/108 lab total
This course is designed to give the student instruction in the use of precision equipment required in the reconditioning of modern automotive engines. Students completing this course will have the manipulative skills and the knowledge of the various machine tools required to completely remanufacture automotive engines.

INDE 181 ENGINE MACHINIST II - 4 Units (formerly AUTO 181, AUTO 180B) Prerequisite: A grade of C or higher in INDE 180
Note: Basic hand tools required
Class Hours: 36 lecture/108 lab total
This course will build on the skills obtained in INDE 180, Engine Machinist I, and will provide new skills in the following areas; advanced machining techniques, high performance machines, changing fixtures, maintenance and service of machine tools.

## APPRENTICESHIP TRAINING

These classes are for apprentices as well as any person interested in any of the below listed trade areas as a career, and is supervised by the Department of Apprenticeship Standards, State of California. This course is not intended for the student who is interested in any of the below listed trade areas as an avocation. The complete course is ten semesters in duration. A student must consult with the College Apprenticeship Coordinator prior to enrolling.

INDE 161 ELECTRICITY - 2 Units
Grading: Pass/No Pass Only
Class Hours: 18 lecture/54 lab total
The course is for electrical apprentices as well as any person interested in the electrical trades. The course is supervised by the Department of Apprenticeship Standards, State of California, and is not intended for the student who is interested in the electrical trade as an avocation. Course contains related technical instruction, supplementary to the apprentice's on-the-job training, beginning with knowledge of the trade, safety, related mathematics and basic processes and progressing through ten semesters (INDE 162, INDE 163) of related instruction. A student must consult with the College Apprenticeship Coordinator prior to enrolling. Note: This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

INDE 162 ELECTRICITY - 2 Units
Grading: Pass/No Pass Only
Prerequisite: A grade of C or higher in four semesters of INDE 161
Class Hours: 18 lecture/54 lab total
INDE 162 is a continuation of the material taught in INDE 161. The course is for electrical apprentices as well as any person interested in the electrical trades. The course is supervised by the Department of Apprenticeship Standards, State of California, and is not intended for the student who is interested in the electrical trade as an avocation. A student must consult with the College Apprenticeship Coordinator prior to enrolling. Note: This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## INDE 163 ELECTRICITY - 2 Units

Grading: Pass/No Pass Only
Prerequisite: A grade of C or higher in four semesters of INDE 162
Class Hours: 18 lecture/54 lab total
INDE 163 is a continuation of the material taught in INDE 162. The course is for electrical apprentices as well as any person interested in the electrical trades. The course is supervised by the Department of Apprenticeship Standards, State of California, and is not intended for the student who is interested in the electrical trade as an avocation. A student must consult with the College Apprenticeship Coordinator prior to enrolling. Note: This course may be repeated one time for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

JAPANESE (JAPN)
Two years of high school foreign language with grades of "C" or better is equivalent to one semester of foreign language at Shasta College.

## JAPN 1 ELEMENTARY JAPANESE - 5 Units

Grading: Pass/No Pass Option
Class Hours: 90 lecture total
This course is designed to give the student training in pronunciation, essentials of grammar, reading, writing, and speaking. The student is also introduced to the customs and culture of the Japanese people.

## JAPN 2 ELEMENTARY JAPANESE - 5 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in JAPN 1 or Foreign Language Placement Level 2 or higher
Class Hours: 90 lecture total
This course is a continuation of JAPN 1. Greater emphasis is placed on writing and the writing system in JAPN 2. Students will learn 90 Kanji characters. Further Japanese culture, history and traditions are provided.

JAPN 3 INTERMEDIATE JAPANESE - 5 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in JAPN 2 or Foreign Language Placement Level 3 or higher
Class Hours: 90 lecture total
This course will give the student higher level language skills necessary to function in an adult environment. Great emphasis is placed on learning how to read and write a number of Kanji characters, and understanding Japan and its people through further Japanese culture, history, life and traditions.

## JAPN 4 INTERMEDIATE JAPANESE - 5 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in JAPN 3 or Foreign Language Placement Level 4
Class Hours: 90 lecture total
This course builds on the higher level language skills acquired in JAPN 3 with greater emphasis on the linguistic diversity needed to function in an adult environment. Emphasis will be on learning to read and write an additional 150 Kanji characters. Stress is placed on Japanese culture.

## JAPN 19 JAPANESE CONVERSATION 1 - 2 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in JAPN 1 or Foreign Language Placement Level 2
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 18 lecture/54 lab total
Intense practice in the spoken language. Course focuses on development of fluency by perfecting speech patterns, increasing vocabulary, and reinforcing pronunciation through simple sentence patterns, audio CDs, oral presentations, interactive communication in activities such as thematically centered conversations and conducting interviews. This course is for the practical use of Japanese. Cultural presentations will also be made through film, filmstrips, anime, music, TV programs, etc.

## JAPN 20 JAPANESE CONVERSATION 2 - 2 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in JAPN 19 or Foreign Language Placement Level 3
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 18 lecture/54 lab total
Continuation of JAPN 19. Further intense practice in the spoken language. Course focuses on development of higher fluency by perfecting speech patterns, increasing vocabulary, and reinforcing pronunciation through additional sentence patterns, audio CDs, oral presentations, interactive communication in activities such as thematically centered conversations and conducting interviews. This course is for more advanced practical use of Japanese. Further cultural presentations will also be made through film, filmstrips, anime, music, TV programs, etc.

## JOURNALISM (JOUR)

JOUR 21 INTRODUCTION TO MASS COMMUNICATIONS - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course is designed principally as a survey of the mass media, including newspapers, magazines, radio, television, motion pictures, books, the Internet and new technologies. The course will include study of mass communication theories, the effect of new technologies on society and the history of mass communication media. Students will research and analyze current mass media phenomena and will produce a term paper reflecting their discoveries.

JOUR 24 NEWSPAPER PRODUCTION - 2 Units (form. JOUR 24A/24BD) Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, and ability to type 25 wpm
Class Hours: 18 lecture/54 lab total
Designed as a practicum in print production, primarily newspaper. Students will be required to work for a print publication, typically the college newspaper, the Lance. Instructional topics include advanced newswriting (first semester), principles of editing (second semester), publication design (third semester), and management issues (fourth semester). The two-hour instructional component is a mixture of lectures, discussion and group work. The lab component will include staff meetings for the college print production. Assessment in the course is based on mastery of the instructional content and quality of work done for a print publication. Students are required to turn in weekly work activity reports and keep files of their published work during the semester. Students who work for a print publication other than the Shasta College Lance must sign up for 1 to 2 units of worksite learning to be taken concurrently with JOUR 24. Note: This course may be repeated three times for a total of four enrollments, since course content varies and skills are enhanced by repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## JOUR 27 NEWSWRITING AND REPORTING - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6, and ability to type 25 wpm
Class Hours: 54 lecture total
Instruction and practice in writing news stories, feature articles, journalistic interviews, critical reviews and editorials. Prepares students for writing and reporting in mass media environments including: newspapers, television and radio news organizations, magazines, public relations agencies, Internet news services and other telecommunications media.

JOUR 29 PHOTOJOURNALISM - 2 Units
Note: Students are urged to furnish own camera
Class Hours: 18 lecture/54 lab total
This course covers the theory and skills needed in the practice of photography for the print media, including college publications and publicity. The program will employ professionally recognized picture-taking techniques and digital imaging procedures.

## MARKETING (MKTG)

See Also: ACCT, BUAD, CIS, OAS
MKTG 72 ADVERTISING - 3 Units (formerly BUSI 72)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hour will total 162)
This course is designed to help the student develop proficiency in handling everyday advertising problems. Covers national and local retailing advertising with major emphasis on local advertising. Topics include budgeting, media selection, layout, copy writing, target identification, setting objective, planning, and desktop publishing availability. This course may be offered in a distance education format.

## MKTG 76 EVENT MARKETING - 3 Units

Class Hours: 54 lecture total
Event Marketing is designed to provide students with the learning opportunity to plan and implement an actual marketing strategy for a local business. The strategy is planned, designed and directed by students, with the assistance of a marketing instructor, an established marketing consultant and a local business manager. Students will be required to research the market for the local business manager, develop a marketing promotional event, implement the event with a budget, and finally evaluate the results of the marketing strategy. This course may also be considered as an internship.

## MKTG 94 MARKETING WORKSITE LEARNING - 1-8 Units

Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MKTG 97 SPECIAL TOPICS IN MARKETING - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in marketing. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MKTG 98 SPECIAL LAB TOPICS IN MARKETING - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in marketing. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## MATHEMATICS (MATH)

MATH 2 PRECALCULUS - 5 Units
Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 90 lecture total (when offered in the Distance Education format, hours will total 270)
A course to prepare the student for MATH 3A (Calculus) utilizing function graphing technology. The content includes linear, polynomial, rational, logarithmic, exponential and trigonometric functions, conic sections, matrices, parametric equations, and their applications. This course may be offered in a distance education format.

MATH 3A CALCULUS 3A-4 Units
Prerequisite: A grade of $C$ or higher in MATH 2, or a grade of $C$ or higher in both MATH 10 and MATH 13, or Math Placement Level 5 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
First semester of a four-semester sequence covering differentiation of single variable functions, applications of the derivative, introduction to integration, and introduction to differential equations. This course may be offered in a distance education format.

## MATH 3B CALCULUS 3B-4 Units

Prerequisite: A grade of C or higher in MATH 3A or Math Placement Level 6 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
Techniques of integration, including substitution, integration by parts and partial fractions. Improper integrals. Applications of integration to geometry and physics: finding areas, volumes and arclength, work, center of mass and fluid force. Sequences, series, absolute convergence and convergence tests, power series and Taylor and MacLaurin series. First-order ordinary differential equations and linear second-order differential equations. This course may be offered in a distance learning format.

MATH 4A CALCULUS 4A - 4 Units
Prerequisite: A grade of C or higher in MATH 3B, or Math Placement Level 7 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total
This course covers vectors in two and three dimensions, partial differentiation, multiple integrals, line integrals, divergence, gradient, curl, Stoke's and Green's Theorems.

## MATH 4B DIFFERENTIAL EQUATIONS - 4 Units

Prerequisite: A grade of C or higher in MATH 3B, or Math Placement Level 7
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total
A course in ordinary differential equations covering first and second order differential equations, with applications; Laplace transforms; series solutions at an ordinary point; matrices and linear algebra; and systems of linear differential equations.

MATH 6 LINEAR ALGEBRA - 3 Units
Prerequisite: A grade of C or higher in MATH 3B, or Math Placement Level 7 or higher
Class Hours: 54 lecture total
A first course in linear algebra, this course provides a thorough treatment of systems of linear equations, including row operations, Gaussian elimination, and matrix algebra. Properties of vectors and the theory of vector spaces are covered. Topics include linear independence, inner products, orthogonality, eigenvectors, eigenspaces, and linear transformations. Applications are included throughout the course.

MATH 8 FINITE MATHEMATICS - 3 Units
Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
The course covers sets, matrices, and systems of equations and inequalities; linear programming; combinatorial techniques, introduction to probability; and mathematics of finance. The course is intended to provide (along with MATH 9) the mathematical skills needed for entry into upper division Business, Social, and Behavioral Science courses.

## MATH 9 SURVEY OF CALCULUS - 4 Units

Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total
A course in analytical geometry, differential and integral calculus for students whose majors require a short course in calculus without the depth offered in MATH 3A.

## MATH 10 PLANE TRIGONOMETRY - 3 Units

Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
A basic course in trigonometry. Topics covered include angles, units of measurement, trigonometric functions, solutions of right and oblique triangles, identities, graphs, vectors, conic sections and polar coordinates. Algebraic and numerical methods are used in problem solving. Graphic calculators are utilized throughout the course.

## MATH 11 PATTERNS OF MATHEMATICAL THOUGHT - 3 Units

Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Class Hours: 54 lecture total
A one-semester survey course emphasizing mathematical reasoning. Various applications of mathematics are covered with topics selected from: Geometry, Statistics, Management Science, Number Theory, Social Science, and Computer Science. The course is designed to give students an understanding of some of the vocabulary and methods of mathematics with a focus on ideas.

## MATH 13 COLLEGE ALGEBRA (formerly MATH 1) - 3 Units

Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course introduces functions and function algebra. The main focus is on linear, polynomial, rational, logarithmic and exponential functions. Students will learn algebraic techniques, modeling techniques and technology-based techniques for solving equations involving these functions and for investigating the graphs of these functions. This course may be offered in a distance education format.

## MATH 14 INTRODUCTION TO STATISTICS - 4 Units

Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
An introductory course in statistics designed to show the role of modern statistical methods in the process of decision making. Concepts are introduced by example rather than by rigorous mathematical theory. The following topics will be covered: measures of central tendency and dispersion, regression and correlation, probability, sampling distributions including the normal, t , and chi-square, statistical inference using confidence intervals and hypotheses testing. This course may be offered in a distance education format.

MATH 17 CALCULUS APPLICATIONS FOR SOCIAL AND LIFE SCIENCES 4 Units
Prerequisite: A grade of C or higher in MATH 3A, or Math Placement Level 6 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
Continued study of differential and integral calculus with applications to Social and Life Sciences. Includes integration methods, modeling with systems of differential equations, calculus of several variables, and partial derivatives. This course may be offered in a distance learning format.

MATH 41A CONCEPTS OF ELEMENTARY MATHEMATICS - 3 Units
Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Note: This course is valuable for students intending to become elementary school teachers.
Class Hours: 54 lecture total
Survey of the elements of mathematics usually taught in the elementary schools. Emphasis is on development of the real number system by intuitive and semirigorous methods, discussion of sets, axiomatics, systems of numeration, arithmetic processes, inductive and deductive reasoning and problem solving.

MATH 41B CONCEPTS OF ELEMENTARY MATHEMATICS - 3 Units
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher (MATH 41A is not a prerequisite for MATH 41B)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Note: This course is valuable for students intending to become elementary school teachers.
Class Hours: 54 lecture total
Survey of the elements of mathematics usually taught in the elementary grades from an advanced standpoint. Emphasis is on geometry, probability and statistics.

## MATH 97 SPECIAL TOPICS IN MATHEMATICS - .5-2 Units

Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in mathematics. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MATH 100 TECHNICAL APPLICATIONS OF MATHEMATICS - 3 Units
Prerequisite: A grade of C or higher in MATH 240 or MATH 260, or Math Placement Level 2 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher.
Class Hours: 54 lecture total
This course blends mathematical topics with practical technical applications. Emphasis is placed on the use of mathematics in solving problems involving arithmetic, algebra, and plane geometry. Practical applications are provided for specific technical occupations.

## MATH 101 BASIC ALGEBRA - 3 Units

Prerequisite: A grade of C or higher in MATH 240 or MATH 260, or Math Placement Level 2 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
A first course in algebra designed to cover the basic concepts and operations of algebra including solving linear equations, exponent laws, arithmetic and factoring of polynomials, and graphing linear equations in two variables. Applications are encountered throughout the course.

## MATH 101L BASIC ALGEBRA LAB - 1 Unit

Class Hours: 54 lab total
This course provides students with hands-on activities that reinforce the concepts of the lecture course, MATH 101. The laboratory is designed to provide students with an opportunity to further investigate the solving of linear equations, exponent laws, arithmetic and factoring of polynomials, and graphing linear equations in two variables.

MATH 102 INTERMEDIATE ALGEBRA - 5 Units
Prerequisite: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 90 lecture total (when offered in the Distance Education format, hours will total 270)
A second course in algebra at the developmental level. This course prepares the student to take a baccalaureate level general education mathematics course. Topics covered include equations and functions of the following types: quadratic, exponential, logarithmic, rational, and radical. The course also covers systems of linear equations and inequalities in two variables and quadratic inequalities in one variable. Applied problems are encountered throughout the course. This course may be offered in a distance education format.

MATH 110 ESSENTIAL MATH (FOR AN ASSOCIATE DEGREE) - 3 Units
Prerequisite: A grade of $C$ or higher in MATH 101, MATH 100, BUAD 106, or Math Placement Level 3 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is designed to provide a survey of mathematical topics that are appropriate for students pursuing an Associate Degree. Topics included are number sense, algebra, geometry, probability and statistics. This course may be offered in a distance education format.

MATH 150 MATH STUDY SKILLS (formerly GS 100) - 1 Unit
Grading: Pass/No Pass Option
Note: Students do not necessarily need to be concurrently enrolled in a math class. Class Hours: 18 lecture total
This course is designed to assist students in learning mathematics through the development of successful study skills and exam-taking methods. This course addresses learning styles, how to read a math book, completing homework assignments, how to take notes and exams, strategies for solving word problems, and techniques for overcoming math anxiety.

MATH 197 SPECIAL TOPICS IN MATHEMATICS - .5-2 Units (P/NP Option) Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with mathematics. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for mathematics majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## MATH 220 BASIC MATHEMATICS - 3 Units

Advisory: A grade of C or higher in ENGL 260 or English Placement Level 3 or higher
Class Hours: 54 lecture total
A course covering the basic skills of addition, subtraction, multiplication and division of whole numbers, fractions, and decimals, with word problem applications. Subjects also taught include prime numbers, order of operations, ratios, and proportions.

## MATH 240 PRE-ALGEBRA - 3 Units

Prerequisite: A grade of C or higher in MATH 220, or Math Placement Level 1 or higher
Advisory: A grade of C or higher in ENGL 260 or English Placement Level 3 or higher
Class Hours: 54 lecture total
This course provides a transition from arithmetic to algebra, covering a review of arithmetic operations; introducing the concepts of variables and signed numbers; the properties of addition, subtraction, multiplication and division containing variables; solution of equations and word problems. This course prepares the student for entry into MATH 101, 100, and/or BUAD 106.

## MATH 260 BASIC MATH AND PRE-ALGEBRA - 5 Units

Advisory: A grade of C or higher in ENGL 260 or English Placement Level 3 or higher
Class Hours: 90 lecture total
This course covers topics from arithmetic through an introduction to algebra. Topics include basic operations on whole numbers, fractions, mixed numbers, decimal numbers, and signed numbers, along with presenting word problem applications for each. Additional topics include order of operations, ratio and proportion, solving percent problems, and an introduction to variables and beginning concepts of algebra. Algebraic concepts to be introduced include addition, subtraction, multiplication, and division of algebraic expressions and solving algebraic equations.

MATH 382 SUPERVISED MATH TUTORING - 0 Units
Class Hours: TBA
A non-credit course offered to help students improve and/or develop good math study skills and achieve mathematical success. Support is provided by tutoring from instructors, advanced math students trained in effective tutoring techniques, and support materials. Any student that is enrolled in a Shasta College math course is eligible to enroll in this course.

## MICROBIOLOGY (MICR)

## MICR 1 MICROBIOLOGY - 5 Units

Prerequisite: A grade of $C$ or higher in one of the following courses: CHEM 1A, 2A, or CHEM 2B
Class Hours: 54 lecture/108 lab total
This course is an introduction to microorganisms, including bacteria, viruses, protozoans, fungi, and helminths. Topics covered include the general properties, characteristics, and classification of microbes, identification and control, genetics and biotechnology, physiology, metabolism, and ecology. Also discussed are immunity and the medical impact of microbial diseases.

## MUSIC (MUS)

All music theory and literature courses: ENGL 190 eligibility. All other music classes have specific musical performance ability requirements which are listed in each course description.

## MUS 1 MUSIC FUNDAMENTALS - 3 Units

Grading: Pass/No Pass Option
Advisory: Concurrent enrollment in MUS 22
Class Hours: 54 lecture total
A course in music theory for the general student. Class includes pitch notation, melody, rhythm and meter, scales and modes, intervals, keys and key signatures, triads, chords, sight singing and melodic dictation. Course is designed for Elementary Education majors and Pre-Music Core Program. Some math, especially fractions, is necessary. A computerized tutorial is included in the text, although not required. Piano skills are helpful in maximizing learning in this course.

## MUS 2 DIATONIC HARMONY AND MUSICIANSHIP - 5 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in MUS 1
Class Hours: 72 lecture/54 lab
A study of scales and modes, key signatures and intervals. Anatomy of harmony and melody. Four-part harmonic writing, basic progression and integration of both with ear training and sight-singing. Analysis of music will be concurrent with materials studied. Course is designed for the Music Core Program and is the first course of the four semester music theory sequence required to satisfy the Music Core Program and lower division music transfer. This course utilizes a lab period to build and apply keyboard skills. Course may be challenged and is transferable.

## MUS 3 DIATONIC HARMONY \& MUSICIANSHIP - 5 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in MUS 2
Class Hours: 72 lecture/54 lab
This course is designed for the Music Core Program. It is the second course of the four-semester Music Theory Sequence required to satisfy the Music Core Program and lower division music transfer, may be challenged and is transferable. Course content includes idiomatic work from selected historical periods with a critical approach to stylistic analysis. All diatonic chords through the introduction of the V7, the first truly chromatic chord will be studied. The syntax of all diatonic chords and their hierarchy in the harmonic language will be learned, along with all inversions. The course work utilizes a lab period to build and apply keyboard skills.

MUS 4 CHROMATIC HARMONY - 5 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in MUS 3
Class Hours: 72 lecture/54 lab
This is the third course of the four semester music theory sequence required to satisfy the Music Core Program and lower division music transfer, may be challenged and is transferable. It must be taken for a grade by music majors. Course content includes modulation, pivot chords, chromatic chords containing tritones, secondary dominants, all sevenths, including minor, major, half diminished, fully diminished, 9th chords, major and minor 11th and 13th chords, with and without tritones. Chromatic alterations as used during the 18th and 19th Centuries. Continuation of 2 and 3 part forms, Neapolitan 6th Chords, Augmented 6th Chords, altered dominants and leads into the concept of Sonata-Allegro form. The course work utilizes a lab period to build and apply keyboard skills.

MUS 5 TWENTIETH CENTURY HARMONY - 5 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in MUS 4
Class Hours: 72 lecture/54 lab
Analytical techniques: development of critical judgments about 20th Century styles. A study of the composition techniques and harmonic practices of the 20th century. This includes the whole-tone scale, church modes, pentatonic scale, 7th, 9th, 11th, 13th chords, chords of omission and addition, non-tertian chords, pan-diatonicism,
chord cluster, meter changing, 12 -tone techniques and other modern developments. The course may culminate in the writing of a composition, probably theme and variations. This course utilizes a lab period to build and apply keyboard skills. This is the fourth semester music theory sequence required to satisfy the Music Core program and lower division music transfer.

MUS 10 MUSIC APPRECIATION - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
A survey course that covers the characteristics of sound, sources of musical sounds and media, instruments, voices, texture, forms, program and dramatic music, vocal and instrumental music, sacred and secular music, folk, popular, jazz, music of other cultures, and historical music from primitive times to the present. Emphasis is placed on listening to music and attending performances and rehearsals. Recommended for AA Humanities elective, CSU General Ed arts elective, and PreMusic Program.

## MUS 11 HISTORY OF JAZZ AND ROCK - 3 Units

Class Hours: 54 lecture total
A survey course that covers the characteristics of jazz forms, including ragtime, dixieland, blues, swing, progressive jazz and rock. Course gives the student the opportunity to become familiar with all of the various styles of jazz and provides an understanding of the social and technical influences that cause stylistic change. This course is designed to create an interest in music for the non-music major. Course is recommended for the Humanities elective.

## MUS 14 WORLD MUSIC - 3 Units

Class Hours: 54 lecture total
World Music is a global exploration of musical traditions of various representative world musical cultures and musical techniques in a variety of cultural contexts not included in the broad genre of European based art music.

## MUS 21 GUITAR - 1 Unit (formerly MUS 21A/21B)

Note: Students must provide their own instruments
Class Hours: 9 lecture/27 lab
A beginning course in the techniques of guitar, including basic chords, strums, finger-picking, and tuning. Guitar history and styles and music fundamentals are also presented. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MUS 22 BEGINNING PIANO - 1 Unit (formerly MUS 22A)
Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 lab
A fundamental course in keyboard techniques (simple piano music, accompaniments, chords, scales, and exercises) and music fundamentals (notation, melody, harmony and rhythm). Course is recommended for Music and Elementary Education majors.

MUS 23 INTERMEDIATE PIANO - 1 Unit (form. MUS 22BD)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in MUS 22
Class Hours: 9 lecture/27 lab
A developmental course in keyboard techniques (simple piano music, accompaniments, chords, scales, and exercises) and music fundamentals (notation, melody, harmony and rhythm). Course is recommended for Elementary Education majors. Note: This course may be repeated twice for a total of three enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## MUS 25 STRINGS - 1 Unit (formerly MUS 25AB/25CD)

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in MUS 1
Note: Instruments provided if available
Class Hours: 9 lecture/27 lab
A beginning course in violin, viola, violoncello and string bass organized to establish basic skills of tuning, pitch and tone production, both pizzicato and bowed, beginning in the first position until security in the frame of the hand and correct playing position is established. Elementary shifting first to third position on violins/violas. Normal and extended first position on the cello. Half and first position on string bass. Advanced positions and shifting on all instruments. Bowing techniques include on the string bowings, detache, linked, legato and mixed bowings when appropriate. Later study of off the string bowings, vibrato, special effects. The major goals of the course are to establish intermediate and advanced skills with sound pedagogy while playing representative string solo music, simple chamber music, duos, trios, quartets, and orchestra music with correct bowings and style. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MUS 29 BEGINNING VOICE - 1 Unit (formerly MUS 27A)
Class Hours: 9 lecture/27 lab
A beginning course in vocal technique, repertoire, stage deportment, and performance. Course utilizes a variety of vocal genres to teach tone quality, breath control, posture, diction and interpretation. Class performances required. Course recommended for Music, Theater Arts, and Elementary Education Majors.

MUS 30 INTERMEDIATE VOICE - 1 Unit (formerly MUS 27B)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in MUS 29
Class Hours: 9 lecture/27 lab
An intermediate course in vocal technique and performance. Course utilizes a variety of vocal literature to teach tone quality, breath control, posture, Iyric diction and interpretation. Class performances required. Course recommended for Music Core Program, Theatre Arts majors and Elementary Education majors.

## MUS 31 CHAMBER CHOIR -1 Unit (formerly MUS 31AD)

Limitation on Enrollment: Admission to this class will be by audition to determine performance ability. This course is a restricted elective for the Music certificate and Music AA Degree. Non-audition courses that fulfill this requirement: MUS 40 Concert Choir, and MUS 41, Shasta College Women's Ensemble.
Note: Performances are required
Class Hours: 54 lab total
Organized for advanced singers. Admission to the class will be by audition to determine performance capability. This course provides performance by solos, duets, trios, quartets and full ensemble. Literature is selected from all periods of music with the emphasis on madrigals. Field trips and performances are required. This course cannot be challenged, must be taken for a grade, and is transferable. Students are expected to progress in skill level to be able to master more advanced material. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MUS 33 JAZZ ENSEMBLE - 1 Unit (formerly MUS 33AD)
Note: Field trips and performances are required.
Class Hours: 54 lab total
This class offers experience in the study and performance of big band commercial and jazz arrangements. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## MUS 35 VOCAL JAZZ ENSEMBLE - 1 Unit (formerly MUS 35AD)

Limitation on Enrollment: Admission to this class will be by audition to determine performance ability. This course is a restricted elective for the Music certificate and Music AA Degree. Non-audition courses that fulfill this requirement: MUS 40 Concert Choir, and MUS 41, Shasta College Women's Ensemble.
Note: Performances are required
Class Hours: 54 lab total
Organized for students interested in singing jazz and commercial music. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MUS 40 CONCERT CHOIR - 1 Unit (formerly MUS 40AD)
Note: Field trips and performances may be required.
Class Hours: 54 lab total
A performing mixed choir (S.A.T.B.) that sings a variety of music, both historical and contemporary. This course teaches fundamentals of reading choral music, using examples from choral literature. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MUS 41 SHASTA COLLEGE WOMEN'S ENSEMBLE - 1 Unit
Grading: Pass/No Pass Option
Note: Performances are required (SSA)
Class Hours: 54 lab total
A performing choir that sings choral works for women's chorus from all musical period and styles. Works are selected from every era. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MUS 42 SHASTA COLLEGE CHORALE - 1 Unit (formerly MUS 42AD) Limitation on Enrollment: Admission to this class will be by audition to determine performance capability. This course is a restricted elective for the Music Certificate and Music AA Degree. Non-audition courses that fulfill this requirement: MUS 40 Concert Choir, and MUS 41, Shasta College Women's Ensemble.
Note: Performances are required.
Class Hours: 54 lab total
A performing mixed choir (S.A.T.B.) that sings a variety of music, both historical and contemporary, with an emphasis on large choral forms such as oratorios and cantatas, accompanied by instruments. Note: Field trips and performances are required. This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## MUS 43 SHASTA COLLEGE SYMPHONY ORCHESTRA - 1 Unit (formerly MUS 43AD)

Grading: Pass/No Pass Option
Limitation on Enrollment: Admission to this class will be by audition to determine performance ability. This course is a restricted elective for the Music Certificate and Music AA Degree. Non-audition courses that fulfill this requirement: MUS 46, Shasta College Symphonic Band or MUS 25, Strings.
Note: Field trips and performances are required Class Hours: 54 lab total
A college symphony orchestra providing an opportunity for instrumentalists to perform standard and contemporary orchestral literature. Field trips and performances are required. All groups rehearse evenings only. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## MUS 44 SHASTA COLLEGE YOUTH SYMPHONY - .5-1 Unit

Grading: Pass/No Pass Option
Limitation on Enrollment: Admission to this class will be by audition to determine performance capability. This course is a restricted elective for the Music Certificate and Music AA Degree. Non-audition courses that fulfill this requirement: MUS 46 Shasta College Symphonic Band or MUS 25 Strings
Note: Field trips and performances are required.
Class Hours: 27-54 lab total
A college based symphony orchestra for the training of young musicians, providing an opportunity to perform standard and contemporary literature for younger musicians. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## MUS 46 SHASTA COLLEGE SYMPHONIC BAND - 1 Unit (formerly MUS 46AD)

Note: Field trips and performances are required.
Class Hours: 54 lab total
A course in performance techniques of both standard and contemporary band literature. Rehearses evenings only. Note: Field trips and performances are required. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## MUS 47 SHASTA COLLEGE JAZZ ENSEMBLE - 1 Unit

 (formerly MUS 47AD)Limitation on Enrollment: Admission to this class will be by audition to determine performance ability. This course is a restricted elective for the Music Certificate and Music AA Degree. Non audition courses that fulfill this requirement: MUS 33 Jazz Ensemble.
Note: Field trips and performances are required.
Class Hours: 54 lab total
This class offers experience in the study and performance of big-band jazz arrangements. Rehearses evenings only. Admission to the class will be by formal audition to determine performance ability [Ed. Code Sect. 58106 (b) (3)]. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## MUS 50 VOCAL INSTITUTE - 1-3 Units

Note: Field trips and performances are required.
Class Hours: 9-27 lecture/27-81 lab total
The Vocal Institute is an intensive course of both vocal and dramatic instruction in an applied performance setting for students who are interested in dramatic vocal performance. Content includes repertoire instruction in art song, musical theater and opera. It is an applied activity course that includes lectures, assignments, rehearsals and studio tutorials. Students learn vocal technique, lyric diction, solo and ensemble performance, character development, stagecraft and movement, and score reading. Art songs and scenes are performed in original languages, including Italian, French, German and English. Skills are built through supervised application
resulting in improved performance. Class includes staged performance of art song, opera and musical theater literature. Note: Course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MUS 51 OPERA IN PERFORMANCE - 1-3 Units
Note: Field trips and performances are required.
Class Hours: 54-162 lab total
This course provides for skill development, both vocal and dramatic, at all levels, beginning through advanced, in an applied performance setting for students who are interested in classical dramatic vocal performance. It is an applied activity course in which skills are built through supervised application resulting in improved performance. Emphasis is on solo, small ensemble and chorus performance. Class culminates with fully- or partially-staged performances of opera literature. Note: Course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MUS 61 PERFORMANCE ANALYSIS - . 5 Unit (formerly MUS 61AD)
Grading: Pass/No Pass Option
Class Hours: 27 lab
A course in the experience of listening, analyzing and criticizing classical music performances in class and community. Applied Music students, local musicians and professional musicians perform and lecture. Required for Pre-Music Program and Music Core Program. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MUS 98 SPECIAL MUSIC TOPICS - .5-2 Units (formerly MUS 98AD) Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to study a variety of topics dealing with performance, musicology, changing knowledge and contemporary issues in the field of music. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Music majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

MUS 301 ORCHESTRA FOR SENIORS - 0 Units
Note: While this is an open enrollment class, an assessment will be conducted by the instructor at the start of the class to determine if the student has the required ability to participate in performances.
Class Hours: 9-54 lab total
A course designed to offer opportunities for older adults to participate in ensemble music with the Symphony Orchestra.

MUS 302 SYMPHONIC BAND FOR SENIORS - 0 Units
Note: While this is an open enrollment class, an assessment will be conducted by the instructor at the start of the class to determine if the student has the required ability to participate in performances. Field trips and performances are required. Class Hours: 54 lab total
A course designed to offer opportunities for adults to participate in ensemble music with the Symphonic Band.

## MUS 303 MUSIC FOR SENIORS - 0 Units

Note: While this is an open enrollment class, an assessment will be conducted by the instructor at the start of the class to determine if the student has the required ability to participate in performances.
Advisory: Demonstrated proficiency in the performance medium.
Class Hours: 18-54 lab total
A course designed to offer opportunities for older adults to participate in music performance.

## NATIVE AMERICAN SUSTAINTABILITY STUDIES (NASS)

## NASS 1 SUSTAINABILITY AND NATIVE AMERICANS - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the environmental practices and philosophies of Native American tribes and cultures. A focus of this course is to show that these practices and philosophies can benefit and substantially impact the current sustainable movement in the United States. This course also examines the contributions, recognized and non-recognized, that Native American tribes and cultures have made in the development of the United States. The study of the true history of Native Americans and their sustainable practices shows how their contributions have been beneficial for society throughout the development of the United States. This course may be offered in a distance education format.

NASS 2 TECHNOLOGY'S IMPACT ON NATIVE AMERICANS - 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the impact of technology on Native American tribes and cultures as well as technology's impact on the environment of the United States. Using Native American tribes and culture as a baseline in this examination, evidence is presented showing how technology has been the cause of environmental damage in this country and to its original inhabitants. This course analyzes technology in an effort to better understand its impact with regard to the future of sustainability. This course also examines technology in relationship to the profit motive and compares this ideology with Native American philosophies and ways of life. This course may be offered in a distance education format.

## NASS 3 FEDERAL INDIAN LAW AND SUSTAINABILITY - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines Federal Legislative Acts, case law, doctrines and constitutional law that shape the legal and historical relationships between Native Americans, Tribes, States and Federal governments with a focus on sustainability and environment issues for Native Americans. This course also examines the current status of Native American tribes, focusing on sustainable topics such as Native American religious freedom, sovereignty, water and land rights. This course may be offered in a distance education format.

NASS 4 NATIVE AMERICAN TRADITIONS/SUSTAINABILITY - 3 Units Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines Native American oral stories and traditions and their relationship to sustainability. By examining oral traditions, the philosophical and cultural ideologies of Native Americans come to the forefront. A clear understanding of Native American cultural ideologies evolves and provides the best environmental philosophies and practices to support the current sustainability movement. This course shows what can be learned by better understanding the Native American oral traditions and stories, as well as, showing the Euro-American oral traditions and stereotypes that were used to suppress Native American philosophies and sustainable practices. This course may be offered in a distance education format.

## NASS 5 NATIVE AMERICAN GLOBALIZATION CONCEPTS - 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the concepts of globalization and compares those concepts against indigenous environmental philosophies and practices. Through the analysis of the expected outcomes of each philosophy, different cultural ideologies become evident. The focus is the best environmental practices supporting the current sustainability movement. This course will also examine the past sustainable practices of Native Americans, as well as, their current sustainable response to globalization efforts. This will include examining traditional, local and tribal economic alternatives to globalization. This course may be offered in a distance education format.

## NATURAL HISTORY (NHIS)

NHIS 15 NATURAL HISTORY - 3 Units
Grading: Pass/No Pass Option
Note: Required day field trips
Class Hours: 54 lecture total
Designed to give the student a unified view of the natural history of California with an emphasis on Northern California. The geology, weather, ecology, life zones, plant and animal species, and aquatic and mountain environments are emphasized.

NHIS 65 NATURAL HISTORY OF PATRICK'S POINT - 1 Unit

## (formerly NHIS 65AB)

Grading: Pass/No Pass Option
Note: Students must provide their own camping gear and food. The college supplies and requires bus transportation for no additional cost.
Class Hours: 9 lecture/27 lab total - includes one orientation meeting plus one weekend
A three day, two night field trip to Patrick's Point State Park to familiarize students with the organisms and ecological interactions occurring in the various plant communities and intertidal zones. One pre-trip introductory lecture will be held. This course is repeatable one additional time since students will be able to reflect a higher level of understanding with increased exposure.

NHIS 105 NATURAL HISTORY OF THE SOUTHERN CASCADES - 1 Unit (formerly GEOL 105)
Grading: Pass/No Pass Option
Note: Required overnight field trip.
Class Hours: 9 lecture/27 lab total
This course is an introductory, short-term field class in which the development of land forms and occupation of niches associated with a volcanic site will be covered. Types of volcanoes, life zones, specimen identification (rock, plant, and animal), and reading topographic maps will be introduced in the classroom and expanded upon during a two-day overnight field trip.

NATURAL RESOURCES
See AGNR for course listings

## NATURAL SCIENCE (NSCI)

NSCI 30 SCIENCE COLLOQUIUM - 1 Unit (formerly INTR 30)
Grading: Pass/No Pass Option
Note: Highly recommended for all science majors
Class Hours: 18 lecture total
This guest-lecture series will feature a broad range of professional scientists invited to summarize research and current issues from their disciplines. Topics will emphasize the bridge between the science (astronomy, biology, chemistry, environmental science, geology, physics and medicine) and society. A schedule of topics and invited speakers will be posted at the beginning of the semester. Note: Due to the topics differing each semester, this course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## NSCI 97 SPECIAL TOPICS IN INTERDISCIPLINARY STUDIES - .5-2 Units

 (formerly INTR 97)Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with Interdisciplinary Studies. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## NSCI 390 NATURAL SCIENCE LEARNING LAB - 0 Units

Class Hours: TBA
A program and facility designed to provide the student with the resources for selfpaced auto-tutorial, computer tutorial, and audio-visual learning within various courses in Natural Science. Tutorial assistance is also available for students in Natural Science courses who experience some difficulty in a particular course or subject area.

## NURSING

See Registered Nursing or Vocational Nursing

## OFFICE ADMINISTRATION (OAS)

OAS 10 EXCEL FOR WINDOWS - I-1 Unit (formerly CIS 10, MIS 73)
Grading: Pass/No Pass Option
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Math and Business Learning Center
Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
This is an introductory course that introduces the concepts, principles, and uses of the EXCEL spreadsheet through multi-media lecture, demonstration, and discussion. Instruction will include use of the Windows environment; creating, editing, formatting, and printing a worksheet; charts/graphs development; and formulas/functions using relative and absolute cell reference. This course may be offered in a distance education format.

## OAS 11 EXCEL FOR WINDOWS - II - 1 Unit (formerly CIS 11, MIS 74)

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in OAS 10.
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Math and Business Learning Center.
Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
Designed to expand and improve worksheet skills through multi-media lecture, demonstration, and discussion. Instruction will include managing workbook data, using tables, analyzing table data, automating worksheet tasks, enhancing charts, and using what-if analysis. This course may be offered in a distance education format.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.

OAS 12 EXCEL FOR WINDOWS - III - 1 Unit (formerly CIS 11, MIS 75)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in OAS 11.
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Math and Business Learning Center. Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
Designed to expand and improve worksheet skills to a more advanced level of proficiency through multi-media lecture, demonstration, and discussion. Instruction will include analyzing data using PivotTables, exchanging data between programs, sharing files using the web, customizing Excel, and advanced worksheet management and programming in Excel. This course may be offered in a distance education format.

OAS 30 CREATING AND MANAGING THE VIRTUAL OFFICE - 3 Units Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
There has been an increase in interest in using technology to work from home telecommuting. Individuals may choose to work outside of their corporate/business office or may be entrepreneurs who wish to be self-employed. This course will explore issues that should be addressed when creating a virtual office. Topics will include managing your time, customizing your workplace, evaluating and buying technology, communicating with technology, and business ethics. This course may be offered in a distance education format.

## OAS 39 INTRODUCTION TO PARALEGALISM - 3 Units <br> (formerly LEGL 39, LEGL 139, BUSI 140)

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Introductory course designed to familiarize the student with the basic principles and the nomenclature of various facets of the law. It includes an overview of legal terminology and classifications, legal ethics, sources of law, family law, probate, civil procedure and litigation, including the structure of the court system, torts, contracts, criminal law and procedure, and property and estate law. This course may be offered in a distance education format.

## OAS 51 INTRODUCTION TO KEYBOARDING AND WORD - 3 Units (formerly BUSI 51)

Grading: Pass/No Pass Option
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Math and Business Learning Center and the Tehama campus.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
An introductory course in keyboarding and Microsoft Word. Class includes learning to type alphabetic, numeric and symbol keys by touch; developing speed and accuracy; and formatting business documents including letters, memos, reports, tables and labels. Recommended for all students that want to learn typing and Microsoft Word. No prior knowledge of computers is required making this course an excellent place to start for beginning computer users. This course may be offered in a distance education format.

## OAS 52 INTERMEDIATE KEYBOARDING AND WORD - 3 Units (formerly BUSI 52) <br> Grading: Pass/No Pass Option

Prerequisite: A grade of C or higher in OAS 51
Note: Internet and classroom students will require access to a computer with the $\overline{s a m e}$ version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Math and Business Learning Center and the Tehama campus.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
An intermediate course in keyboarding and Microsoft Word. This course continues the development of keyboarding speed and accuracy while emphasizing the formatting of various kinds of business correspondence, reports, tables, forms, and desktop publishing projects from rough drafts. This course may be offered in a distance education format.

## OAS 53 ADVANCED KEYBOARDING AND WORD - 3 Units (formerly BUSI 53)

## Grading: Pass/No Pass Option

Prerequisite: A grade of C or higher in OAS 52
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Math and Business Learning Center and the Tehama campus.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
An advanced course in keyboarding and Microsoft Word. This is the capstone course allowing the student to meet any business document requirement. The
course is designed to give additional practice in building speed and accuracy and to apply previously learned document formatting competencies to a variety of integrated office projects in international marketing, hospitality, travel, energy, electronics, insurance, government, law, and medicine. This course may be offered in a distance education format.

OAS 63 VOICE RECOGNITION SOFTWARE - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture/9 lab total
This course introduces voice-recognition software to the student through multimedia lecture/demonstration/ discussion and hands-on application using the IBM compatible microcomputer. Using voice-recognition software, the students will input information into the computer by voice rather than by keyboard. It will focus on learning dictation commands and techniques for continuous voice dictation. The course covers voice commands for inputting, formatting and editing documents as well as for using menus and mouse commands.

## OAS 64 COMPUTERIZED TEN-KEY - 5 Unit (formerly BUSI 64)

Grading: Pass/No Pass Option
Class Hours: 27 lab total (when offered in the Distance Education format, hours will total 27)
A course designed to teach the numeric 10-key pad by touch on the computer with speed and accuracy using industry standards for data entry. Proficiency on three employment tests used by three large interstate corporations help the student meet employment standards. The course has been designed to accommodate hearing impaired students. This course may be offered in a distance education format.

## OAS 80 OUTLOOK - 1 Unit

Grading: Pass/No Pass Option
Advisory: Ability to type 25 wpm
Note: Class will require outside time using a computer with appropriate software. Computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the same version of Microsoft Operating System and Office Suite being used in the course. Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
This course introduces the student to the use of Microsoft Outlook, a desktop information management program in the Microsoft Office Suite. Instruction will include managing email messages, scheduling appointments and activities with the Calendar, entering and updating names and addresses as contacts, creating and maintaining an electronic to-do list with Tasks, and using Categories to organize, sort, and search. This course may be offered in a distance education format.

## OAS 84 OFFICE ADMINISTRATION WORKSITE LEARNING - 1-8 Units

 Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## OAS 91 WORD FOR WINDOWS - I-1 Unit

## Grading: Pass/No Pass Option

Advisory: Ability to type 25 wpm
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.
Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
This course introduces word processing through multi-media lecture/demonstration/discussion using Microsoft WORD for Windows on the IBM compatible microcomputer. Microsoft WORD will be used to complete the functions of creating, editing, saving, opening and printing documents with varying degrees of difficulty. Topics to be covered include: file management; creating new documents using both the blank Word document screen or wizards and templates; selecting text to move/copy/delete/format or utilize the clipboard; creating and formatting tables, including calculations; spelling and thesaurus tools; font, paragraph and page formatting; customized tabs; indents; bullets and numbering; borders and shading; headers, footers, and page numbering; finding and replacing. This course may be offered in a distance education format.

## OAS 92 WORD FOR WINDOWS - II - 1 Unit

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in OAS 91 or OAS 51. Ability to type 25 wpm
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.
Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
Designed to expand and improve basic word processing skills to a higher level of proficiency through multi-media lecture/demonstration/discussion on an IBM compatible microcomputer. Instruction will include a review of basic concepts and commands, illustrating documents with graphics, creating a web site, merging word documents, working with styles and templates, developing multi-page documents; and integrating Word with other programs. This course may be offered in a distance education format.

OAS 93 WORD FOR WINDOWS - III - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in OAS 92
Advisory: Ability to type 25 wpm
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.
Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
Designed to expand and improve word processing skills to a more advanced level of proficiency through multi-media lecture/demonstration/discussion on an IBM compatible microcomputer. Instruction will include a review of word processing concepts and commands; exploring advanced graphics, building forms, working with charts and diagrams, collaborating with workgroups, using macros and customizing Word. This course may be offered in a distance education format.

## OAS 94 POWERPOINT - 1 Unit

Grading: Pass/No Pass Option
Advisory: Ability to type 25 wpm. Familiarity with Word Processing.
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.
Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hours will total 63)
This is a hands-on course designed to familiarize students with Microsoft PowerPoint. Students will learn how to create effective slide show presentations with emphasis on customizing text, graphics and charts. Students will work with embedded and linked objects as well as hyperlinks and use PowerPoint's many slide show features. This course may be offered in a distance education format.

OAS 97 SPECIAL TOPICS IN OFFICE ADMINISTRATION - .5-2 Units Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in office administration. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, it is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## OAS 98 SPECIAL LAB TOPICS IN OFFICE ADMINISTRATION -.5-2 Units

 Grading: Pass/No Pass OptionClass Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in office administration. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## OAS 110 BEGINNING MEDICAL TERMINOLOGY - 3 Units (formerly HEOC 110, MEDA 151)

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides students with an understanding of the language of medicine through the study of basic word structures and anatomical, pathological, and operative terms used within the integumentary, musculoskeletal, nervous, cardiovascular, respiratory systems, blood and lymphatic systems and digestive system. This course may be offered in a distance education format.

## OAS 111 ADVANCED MEDICAL TERMINOLOGY - 3 Units

(formerly OAS 111, MEDA 152) - 3 Units
Prerequisite: A grade of C or higher in OAS 110
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is a continuation of OAS 110 providing students with an understanding of medical terms used within the endocrine, special senses, urinary, male and female reproductive systems, and specialty areas such as Obstetrics, Pharmacology, Mental health, and Gerontology. This course may be offered in a distance education format.

## OAS 112 MEDICAL CODING - 3 Units (formerly HEOC 112, MEDA 156, MEDA 156A)

Prerequisite: A grade of C or higher in OAS 110
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is basic introduction to coding for medical billing and reimbursement. It is designed to provide the learner with fundamentals needed to use the systems correctly and consistently. The student will learn the structure and format of medical coding books (e.g., ICD-9-CM or ICD-10-CM; CPT; HCPCS, Level II) and develop skills in assigning accurate codes. The student will use acceptable coding guidelines through practical application. This course may be offered in a distance education format.

## OAS 113 ADVANCED MEDICAL CODING - 3 Units

Prerequisite: A grade of C or higher in OAS 112
Corequisite: Students must be concurrently enrolled in, or have completed OAS 111 with a grade of $C$ or higher.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course has been designed to enable the learner to interpret health record documentation for code assignment. Students will apply established coding guidelines for each coding classification system included in the course (e.g. ICD-9-CM/ICD-10-CM; CPT; HCPCS, Level II). This course may be offered in a distance education format.

OAS 114 HEALTHCARE BILLING AND REIMBURSEMENT - 3 Units
Corequisite: Students must be concurrently enrolled in, or have completed OAS 113 and OAS 150 with a grade of $C$ or higher.
Class Hours: 54 lecture total
This course will provide the linkage between specialized medical office administration practices such as computerized medical account management and medical coding. The course will enable students to understand the processing of healthcare claims as it relates to various insurance payer requirements beginning with abstracting information from medical chart documents and following procedural steps based on the nature of the patient status and payer.

## OAS 150 COMPUTERIZED MEDICAL ACCOUNT MANAGEMENT - 3 Units (formerly MEDA 150B)

Advisory: A grade of C or higher in OAS 51 and OAS 110
Class Hours: 54 lecture total
This course is designed to prepare students for entry-level positions in medical office billing. Topics covered are computerized systems for appointment scheduling and follow-up: claim forms and coding; patient and insurance billing, and medical practice financial management.

## OAS 152 KEYBOARDING FOR SPEED AND ACCURACY - . 5 Unit <br> (formerly OAS 268, OAS 268AD, BUSI 268AD)

Grading: Pass/No Pass Option
Note: Class may require outside time using a computer with internet access and appropriate software. Computer access is provided on campus at the Math and Business Learning Center and the Tehama campus. Students taking the Internet format of this course must have access to the same version of Microsoft Operating System and Office Suite being used in the course.
Class Hours: 27 lab total (when offered in the Distance Education format, hours will total 27)
Designed for the beginning to advanced keyboarding student to improve typing speed and accuracy. Specific drills, proper typing technique, and ergonomics will be covered in the course. Development of keyboarding skills are attained through repetitive typing of specific drills designed to improve both accuracy and speed. This course may be repeated twice for a total of three enrollments since skills are enhanced by repetition and practice. This course may be offered in a distance education format.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## OAS 157 OFFICE PROCEDURES - 3 Units (formerly BUSI 157)

Advisory: A grade of $C$ or higher in OAS 51, and a grade of $C$ or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A capstone course in office technology. Content includes office ethics, greeting office callers, telephone techniques, working with others on the job, mail procedures,
filing procedures, reference sources, appointment/calendaring, office reprographics, employment testing, and career planning. This course may be offered in a distance education format.

OAS 158 MEDICAL OFFICE PROCEDURES - 3 Units (formerly BUSI 158) Advisory: A grade of C or higher in OAS 51; and a grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total
This is an essential class for students wishing to work in a medical office. Content includes: understanding the medical practice, the unique issues of working in a medical office, interacting with patients, dealing with insurance and finances, scheduling appointments, and obtaining employment.

## OAS 160 MEDICAL TRANSCRIPTION - 3 Units

(formerly OAS 159/160, BUSI 159B)
Corequisite: Students must be concurrently enrolled in, or have completed OAS 110 with a grade of $C$ or higher
Prerequisite: A grade of C or higher in BUAD 166 and OAS 51
Note: Class may require outside time using a computer with Internet access and appropriate software. Computer access is provided on campus at the Math and Business Learning Center and the Tehama campus. Students taking the Internet format of this course must have access to the same version of Microsoft Operating System and Office Suite being used in the course.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
Designed for the beginning to advanced keyboarding student to improve typing speed and accuracy. Specific drills, proper typing technique, and ergonomics will be covered in the course. Development of keyboarding skills are attained through repetitive typing of specific drills designed to improve both accuracy and speed. This course may be repeated twice for a total of three enrollments since skills are enhanced by repetition and practice. This course may be offered in a distance education format.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

OAS 166 RECORDS MANAGEMENT - 2 Units (formerly BUSI 163)
Class Hours: 36 lecture/9 lab total (when offered in the Distance Education format, hours will total 117)
A study of the basic principles, rules, and procedures of filing. It includes a study of alphabetic, numeric, subject, and geographic filing. Various types of filing equipment will be analyzed. This course may be offered in a distance education format.

OAS 171 PROOFREADING SKILLS - 2 Units (formerly BUSI 168)
Advisory: Ability to type 25 wpm.
Class Hours: 36 lecture total
The course covers the application of appropriate methods of proofreading documents common to the work place, and an overview of the essential skills needed to perform text-editing functions in business settings. High level proofreading skills are vital to the efficient operation and productivity of the information-processing office. Proofreading has become a "must" for quality control in the work place.

OAS 197 SPECIAL TOPICS IN OFFICE TECHNOLOGY - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of Office Technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for any of the Office Technologies majors or Business majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

OAS 198 SPECIAL LAB TOPICS IN OFFICE TECHNOLOGY - .5-2 Units Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in office technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## OAS 250 KEYBOARDING AND WORD - ADAPTIVE - 3 Units (formerly OAS 250AD and BUSI 250AD)

Grading: Pass/No Pass Option
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Math and Business Learning Center and the Tehama campus.
Class Hours: 36 lecture/54 lab total
A personal-use individualized course in keyboarding designed to meet the needs of students with physical and/or specific learning disabilities. Interested students must
be interviewed by the instructor and DSPS and/or Learning Services Office to determine if the course is appropriate for the student's abilities and interests and to make arrangements for support services. The course includes instruction in correct keyboarding techniques appropriate for the individual student. Instruction covers memos, letters, tables, reports, and business forms. Students work toward personal growth objectives. This course does not meet the requirement of OAS 51 Introduction to Keyboarding and Word for an Associate in Arts degree or certificate.

## PHILOSOPHY (PHIL)

## PHIL 6 INTRODUCTION TO PHILOSOPHY - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A transfer humanities course introducing students to the major issues which philosophers have found important. It will explore what is special about the questions philosophers ask and consider the most famous answers philosophers have tried to give to those questions. Areas covered include philosophy of mind, epistemology, metaphysics, moral philosophy, political philosophy, philosophy of science, aesthetics, and philosophy of religion. The course may be offered in a distance education format.

## PHIL 7 ETHICS: UNDERSTANDING RIGHT AND WRONG - 3 Units

 Grading: Pass/No Pass OptionAdvisory: A grade of C or higher in ENGL 1A or English Placement Level 7 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Introduces students to a range of moral and social problems which are important in themselves and which philosophers have found especially interesting. Emphasis will be given to exploring many of the positions which can be taken on these issues, and to evaluating the arguments which can be given for those positions. Topics covered include general moral theories, abortion, euthanasia, capital punishment, cloning, warfare, gender and sexuality issues, political and economic issues, and the moral status of the natural world. This course may be offered in a distance education format.

## PHIL 8 LOGIC - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Logic is the science that evaluates arguments. PHIL 8 provides students with extensive experience in identifying a range of correct and incorrect argument forms. Examples will come from everyday life. Students will also learn to use both the traditional categorical syllogism and modern statement logic. This course may be offered in a distance education format.

## PHIL 10 LIFE AND DEATH MORAL ISSUES - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course will explore in detail the entire range of life and death moral issues which philosophers consider. These issues include abortion, euthanasia, capital punishment, warfare, self-defense cases, various crisis cases, cloning, and stem cell research, among others. We will examine both the various moral claims made about these issues and the moral theories used in defense of those claims. This course can serve as an introduction to moral philosophy in particular, and to philosophy in general. The issues covered in this course should be of intrinsic interest to everyone. This course may be offered in a distance education format.

## PHYSICAL EDUCATION (PE)

## HEALTH AND WELLNESS

PE 4 LIFETIME FITNESS - 3 Units
Grading: Pass/No Pass Option
Class Hours: 45 lecture/27 lab total
In keeping with the primary purpose of Wellness, this course is designed to provide insight relative to the values derived by enriching the quality of our lives. Further, it includes the mechanisms for identifying individual needs and providing the means for measurement and improvement of lifestyles to reach a higher level of well being. This course provides a personalized approach to assess and prescribe the necessary programs to improve the components of physical fitness and wellness. In addition to the health related components of physical fitness (cardiovascular, muscular strength and endurance, muscular flexibility, body composition), topics covered include nutrition and weight control, cardiovascular risk reduction, stress management, drug and alcohol abuse, AIDS, and environmental health issues. This course further prepares enrollees in successfully passing certification testing conducted by National Council on Strength and Fitness.

## PHYSICAL EDUCATION/FITNESS \& CONDITIONING

PE 6 AEROBIC INSTRUCTOR TRAINING - 2 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture/27 lab total
A comprehensive class covering current materials on exercise science as related to aerobic exercise instruction. Theories of aerobic training, strength and endurance development and exercise analysis are presented. Students will develop skills for creating aerobic exercises and dance choreography, low/high impact modification, formatting and cueing techniques. Written examinations and instructor critique on all materials may result in the student obtaining a certificate of completion.

PE 10 FOUNDATIONS OF HUMAN MOVEMENT AND EXERCISE PHYSIOLOGY - 3 Units (formerly HPE 8)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
An introduction of the professional foundations of Kinesiology: Physical Education, Exercise Science, and Sports Medicine. Includes history, philosophy, concepts, programs, qualification, careers, issues, and future of the discipline.

PE 11 FUNDAMENTAL CONDITIONING - .5-1.5 Units (formerly HPE 1AD) Grading: Pass/No Pass Option
Class Hours: 27, 54, or 81 total activity
Designed to acquaint the student with exercises, activities and use of muscles to perform specific tasks and to improve physical well-being. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 12 WEIGHT TRAINING - .5-1.5 Units (formerly HPE 24AD)
Grading: Pass/No Pass Option
Class Hours: 27, 54, or 81 total activity
A course in weight training and general conditioning. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 13 BODY MECHANICS - .5-1.5 Units (formerly HPE 33AD)
Grading: Pass/No Pass Option
Class Hours: 27,54, or 81 total activity
Course is directed at the student who does not have exercise or physical activity as a regular part of his or her life. The course has a dual concern: 1) that the student receive a strong theoretical base of knowledge so he/she can better understand and appreciate the need for and the means of a physical conditioning program, and 2) that student become involved in a physical conditioning program on a regular basis. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 14 BODY FITNESS ASSESSMENT AND CONDITIONING - .5-1 Unit (formerly HPE 66AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Designed to provide the students with knowledge of personal levels of physical fitness and enable them to develop and implement a strategy to improve fitness levels through physiology of exercise, nutrition, and fundamental conditioning. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PE 15 AEROBIC DANCE - .5-1 Unit (formerly HPE 53AD)

Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
A complete physical conditioning program designed to increase cardiovascular efficiency through choreographed dances. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PE 16 AEROBIC EXERCISE - .5-1 Unit (form. HPE 63AD) <br> Grading: Pass/No Pass Option

Class Hours: 27 or 54 total activity
A complete physical conditioning program designed to increase cardiovascular efficiency through aerobic type exercises. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 17 YOGA - .5-1 Unit
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Introduction to basic yoga postures. Students will study and practice the principles of yoga exercise through self-awareness, breathing, relaxation, visualization, and meditation. Students will also learn the origin and history of yoga as a form of healthful exercise. This course is designed to meet all levels of experience in yoga techniques. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ADAPTED PHYSICAL EDUCATION

The Adapted Physical Education program is taught by trained, physical education instructors. The Adapted PE program incorporates the use of the gymnasium, swimming pools, weight room, and cardio room, in an individualized activity program developed for each student.

PE 20 INTRODUCTION TO ADAPTED PHYSICAL EDUCATION - .5-1 Unit (formerly HPE 75AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Introduction to adapted physical education is designed to provide an orientation to the diversified adapted program of developmental activities, games, and sports. Assessment is done to best suit the interest, capacities and limitations of students with disabilities who may not safely or successfully engage in unrestricted participation in the general physical education program. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PE 21 EXERCISE FOR ORTHOPEDIC DISORDERS OR INJURIES -

 .5-1 Unit (formerly HPE 73AD)Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Exercise for orthopedic disorders is designed to provide a program of activities suitable for those students who are unable to participate in a regular physical education program because of orthopedic injury or disorders. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PE 22 EXERCISE FOR CARDIOVASCULARLY IMPAIRED - .5-1 Unit

 (formerly HPE 74AD)Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Exercise designed to provide a program of activities suitable for those students who are unable to participate in a regular physical education program because of cardiovascular impairments. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PE 23 EXERCISE FOR RESPIRATORY DISORDERS - .5-1 Unit <br> (formerly HPE 76AD)

Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Exercise designed to provide a program of activities suitable for those students who are unable to participate in a regular physical education program because of respiratory disorders. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PE 26 ADAPTED WEIGHT TRAINING - .5-1 Unit

Grading: Pass/No Pass Option
Class Hours: 27 or 54 lab total
Strength and flexibility development through supervised progressive exercise. Includes initial assessment, exercise prescription and equipment, and technique instruction. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 27 ADAPTED AQUATICS FOR THE PHYSICALLY LIMITED - .5-1 Unit Grading: Pass/No Pass Option
Class Hours: 27 or 54 lab tota
Aquatic exercise designed to provide a program of activities for those students who are unable to participate in a regular physical education aquatic program because of physical or mental impairments. This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## AQUATICS

PE 30 SWIMMING - .5-1 Unit (formerly HPE 40AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
This class is designed to offer instruction in aquatic skills necessary for survival, efficiency in swimming and diving, and conditioning in the aquatic environment. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 31 AQUA AEROBICS - .5-1 Unit (formerly HPE 79AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Aqua aerobics is an activity class covering basic aquatic exercises. Water is the perfect medium providing natural resistance for toning, firming, and strengthening. Body alignment, heart rates, fun, and pleasure without strain will be included. Note:
This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 32 WATER POLO - .5-1 Unit (formerly HPE 44AB)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
A course designed to acquaint students with the sport of water polo. Emphasis on rules, individual skills, team play, and game strategy. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 35 LIFEGUARD TRAINING - 2 Units (formerly HPE 43AB)
Grading: Pass/No Pass Option
Advisory: Red Cross Level VII swimming skills.
Class Hours: 27 lecture/27 lab total
A course designed to provide training and prepare student for certification in American Red Cross Lifeguard Training, Professional Rescuers CPR, and First Aid Basics. Note: This course may be repeated any number of times for credit by students who are legally mandated to meet training requirements as a condition of continued pay or volunteer employment.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 36 WATER SAFETY INSTRUCTORS - 1.5 Units (formerly HPE 54) Grading: Pass/No Pass Option
Class Hours: 18 lecture/27 lab total
A course designed to provide laboratory experience in the methodology of American Red Cross swimming instruction. Emphasis is placed on practical application of instructional theory used at all levels of swimming instruction. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability..

## PE 37 SPRINGBOARD DIVING - .5-1 Unit

Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
A course designed to present skills and techniques of one and three meter diving, and diving performance criteria. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## DANCE

For Dance courses, refer to DAN in the catalog

## RACQUET SPORTS

PE 51 TENNIS - .5-1 Unit (formerly HPE 35AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
A course in fundamentals, techniques, rules of play, strategies, and social courtesies in singles and doubles play with the skill ranging from the beginning to the advanced. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## INDIVIDUAL SPORTS AND TEAM SPORTS

PE 60 SELF-DEFENSE - .5-1 Unit (formerly HPE 2AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
This course will be conducted in such a manner that both the beginning and intermediate student will be able to learn and use basic to advanced skills. Self defense techniques will be introduced from basic to advanced levels. The student will acquire fundamental skills in stances, punches, blocks, kicks, and escaping techniques. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 62 GOLF - .5-1 Unit (formerly HPE 32AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Designed to teach the fundamental skills and knowledge necessary to participate in the game of golf. A course for the beginning, intermediate, or advanced player who desires a review. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 69 FOOTBALL - .5-1 Unit (formerly HPE 3AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
An activity course designed to teach skills and techniques of football. Team play is emphasized to prepare the beginner and intermediate player for competitive play. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 70 VOLLEYBALL - .5-1 Unit (formerly HPE 6AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Designed to develop basic skills and an understanding and appreciation for the game of volleyball. The use of lecture, demonstration and drills/practice will provide the student with the opportunity for skill improvement. Rules, strategy, and team play will enhance the student's knowledge to continue this activity at a higher level. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 71 SOFTBALL - .5-1 Unit (formerly HPE 5AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
An activity course designed to teach skills and techniques of softball. Team play is emphasized to prepare the beginning and intermediate player for competitive play. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 72 BASEBALL - .5-1 Unit (formerly HPE 5AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
An activity course designed to teach skills and techniques of baseball. Team play is emphasized to prepare the beginning and intermediate player for competitive play. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 73 TRACK \& FIELD TECHNIQUES - .5- 1 Unit (formerly HPE 12AD) Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
An activity course designed to teach and practice fundamental skills of track and field. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 74 SOCCER - .5-1 Unit (formerly HPE 41AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
A course designed to provide instruction on the history, theory, fundamental skills, strategies, and techniques of the game of soccer. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 75 BASKETBALL - .5-1 Unit (formerly HPE 4AD)
Grading: Pass/No Pass Option
Class Hours: 27 or 54 total activity
Designed to develop basic skills and understanding and appreciation for the game of basketball. The use of lecture, demonstration and drills will provide the student with the opportunity for skill development. Rules, strategy, and team play will enhance the students knowledge to continue this activity at a higher level. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 97 SPECIAL TOPICS IN PHYSICAL EDUC. - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in physical education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 98 SPECIAL TOPICS IN PHYSICAL EDUCATION-ACTIVITY-.5-2 Units Grading: Pass/No Pass Option
Class Hours: 27-108 total activity
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in physical education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 197 SPECIAL TOPICS IN PHYSICAL EDUCATION - .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in physical education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PE 198 SPECIAL TOPICS IN PHYSICAL EDUCATION-ACTIVITY-.5-2 Units Grading: Pass/No Pass Option
Class Hours: 27-108 total activity
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in physical education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## NON-CREDIT - PHYSICAL EDUCATION

PE 300 FITNESS FOR SENIORS - 0 Unit (formerly HPE 305) Class Hours: 27-54 total activity
This course is designed to provide instruction for seniors on the utilization of modified postures that are specifically designed to provide gentle stretching, strengthening, and balancing with emphasis in increasing limberness and stamina.

PE 301 FITNESS FOR THE DEVELOPMENTALLY DISABLED - 0 Unit Class Hours: 27-54 total activity
This course is designed to provide instruction to the developmentally disabled person for the utilization of modified exercises that are specifically designed to provide gentle stretching, strengthening, range of motion, with emphasis in increasing limberness and stamina. Nutritional aspects of wellness will be discussed.

## PHYSICAL EDUCATION - ATHLETICS (PEAT)

## PEAT 2 CLINICAL EXPERIENCES IN SPORTS MEDICINE - 1-3 Units (formerly HPE 91L)

Grading: Pass/No Pass Option
Class Hours: 54-162 total activity
Theory, practice, and hands-on experience in athletic injury prevention, athletic emergency care, therapeutic treatment, and rehabilitation of athletic injuries in the Athletic Treatment Center. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PEAT 3 STRENGTH TRAINING \& CONDITIONING FOR ATHLETES - <br> 5-1.5 Units (formerly HPE 64AD)

Grading: Pass/No Pass Option
Class Hours: 27, 54, or 81 total activity
A course designed to provide specialized strength training program to meet the needs of athletes of various sports. Note: Since subject matter varies each time course is taught, course is repeatable three times for a total of four enrollments.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PEAT 4 THEORY OF COACHING - 1 Unit (formerly HPE 85/86)
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
A course designed to teach the coach or aspiring coach a greater understanding of coaching philosophies, sport pedagogy, sport physiology, adolescent psychology, sport medicine, and sport rules and regulations, and how to deal with parental dilemmas and ethical issues.

PEAT 5 INTERCOLLEGIATE FOOTBALL - 3 Units (formerly HPE 14AB) Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability
Class Hours: 162-180 hours total
Football instruction, practice and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PEAT 6 THEORY OF FOOTBALL - 1 Unit (formerly HPE 9AB)
Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate football. Note: This course may be repeated once for a total of two enrollments. As the athlete's skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

PEAT 7 INTERCOLLEGIATE VOLLEYBALL - 3 Units (formerly HPE 61AB) Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability
Class Hours: 162-180 hours total
Volleyball instruction, practice and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PEAT 8 THEORY OF VOLLEYBALL - 1 Unit (formerly HPE 52AB)

Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate volleyball. Note: This course may be repeated once for a total of two enrollments. As the athlete's skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

## PEAT 9 INTERCOLLEGIATE CROSS COUNTRY - 3 Units <br> (formerly HPE 29AB)

Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability
Class Hours: 162-180 hours total
Cross country instruction, practice and competition at the intercollegiate level. Note:
This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PEAT 10 THEORY OF CROSS COUNTRY - 1 Unit (formerly HPE 30AB) Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory and strategies of cross country. Note:
This course may be repeated once for a total of two enrollments. As the athlete's skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction

PEAT 11 INTERCOLLEGIATE BASKETBALL - 3 Units (formerly HPE 15AB) Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability Class Hours: 162-180 lab hours total
Basketball instruction, practice and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PEAT 12 THEORY OF BASKETBALL - 1 Unit (formerly HPE 13AB)
Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory and strategies of intercollegiate basketball. Note: This course may be repeated once for a total of two enrollments. As the athlete's skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

PEAT 13 INTERCOLLEGIATE SOFTBALL - 3 Units (formerly HPE 62AB) Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability
Class Hours: 162-180 hours total
Softball instruction, practice and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PEAT 14 THEORY OF SOFTBALL - 1 Unit (formerly HPE 42AB)

Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate softball Note: This course may be repeated once for a total of two enrollments. As the athlete's skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

PEAT 15 INTERCOLLEGIATE BASEBALL - 3 Units (formerly HPE 16AB) Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability
Class Hours: 162-180 hours total
Baseball instruction, practice and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PEAT 16 THEORY OF BASEBALL - 1 Unit (formerly HPE 10AB)
Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory and strategies of intercollegiate baseball. Note: This course may be repeated once for a total of two enrollments. As the athlete's skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

## PEAT 17 INTERCOLLEGIATE TRACK AND FIELD - 3 Units

 (formerly HPE 18AB)Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability
Class Hours: 162-180 hours total
Track and field instruction, practice and competition at the intercollegiate level.
Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PEAT 18 THEORY OF TRACK AND FIELD - 1 Unit (formerly HPE 28AB) Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory and strategies of intercollegiate track and field. Note: This course may be repeated once for a total of two enrollments. As the athlete's skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

PEAT 19 INTERCOLLEGIATE TENNIS - 3 Units (formerly HPE 17AB)
Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability Class Hours: 162-180 hours total
Tennis instruction, practice and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PEAT 20 THEORY OF TENNIS - 1 Unit (formerly HPE 68AB)
Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory and strategies of intercollegiate tennis. Note: This course may be repeated once for a total of two enrollments. As the athlete's skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

PEAT 21 INTERCOLLEGIATE GOLF - 3 Units (formerly HPE 19AB) Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability
Class Hours: 162-180 hours total
Golf instruction, practice and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PEAT 22 THEORY OF GOLF - 1 Unit (formerly HPE 69AB)

Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory and strategies of golf. Note: This course may be repeated once for a total of two enrollments as the athlete's skills and proficiencies are enhanced by supervised repetition and practice.

PEAT 23 INTERCOLLEGIATE SOCCER - 3 Units (formerly HPE 71AB)
Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability
Class Hours: 162-180 hours total
Soccer instruction, practice, and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PEAT 24 THEORY OF SOCCER - 1 Unit (formerly HPE 70AB)

Grading: Pass/No Pass Option
Class Hours: 9 lecture/ 27 activity total
A course designed to teach the rules, theory and strategies of intercollegiate soccer.
Note: This course may be repeated once for a total of two enrollments. As the athlete's skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

PEAT 25 INTERCOLLEGIATE SWIMMING AND DIVING - 3 Units (formerly HPE 82AB)
Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability Class Hours: 162-180 hours total
Swimming and diving instruction, practice and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

PEAT 26 THEORY OF SWIMMING AND DIVING - 1 Unit (formerly HPE 83AB) Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate swimming and diving. Note: This course may be repeated once for a total of two enrollments. As the athlete's skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

PEAT 29 INTERCOLLEGIATE WRESTLING - 3 Units
Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability Class Hours: 162-180 lab total
Wrestling instruction, practice and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.** (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PEAT 30 THEORY OF WRESTLING - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 lab total
A course designed to teach the rules, theory, and strategies of intercollegiate wrestling. Note: This course may be repeated once for a total of two enrollments. As the athlete's skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

PEAT 31 SPORT SAFETY TRAINING - . 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
A course designed to train coaches and prospective coaches in the area of sport safety and first aid. Adult and child CPR is covered. Upon successful completion of this course, the student is eligible for American Red Cross Certification in sport safety training.

PEAT 94 WORKSITE LEARNING FOR ATHLETICS/COACHING -1-8 Units Grading: Pass/No Pass Option
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## PHYSICAL SCIENCE (PHSC)

(see also Earth Science - ESCI)
PHSC 1 PHYSICAL SCIENCE SURVEY - 4 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in MATH 101, or Math Placement Level 3 or higher Class Hours: 54 lecture/54 lab total
Lecture-discussion, demonstration and lab activities cover selected theories of physics and chemistry, emphasizing the conceptual basis of these theories. The course is designed for non-science majors as part of their general education requirement in science. This course is not appropriate for students who have taken college level physics or chemistry.

## PHYSICS (PHYS)

PHYS 2A GENERAL COLLEGE PHYSICS - 4 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Class Hours: 54 lecture/54 lab total
This course provides an introduction to the principles and applications of mechanics, using the mathematical tools of algebra and right triangle trigonometry. Topics include vectors, kinematics, Newton's Laws, gravity, energy and momentum, equilibrium of rigid bodies, heat, fluids and simple harmonic motion.

PHYS 2B GENERAL COLLEGE PHYSICS - 4 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in PHYS 2A
Class Hours: 54 lecture/54 lab total
This course is a continuation of PHYS 2A, covering mechanical waves (including sound), electricity, magnetism, geometric optics, interference and diffraction and elementary modern physics.

PHYS 4A PHYSICS (MECHANICS) - 4 Units
Prerequisite: A grade of C or higher in MATH 3A, or Math Placement Level 6 or higher
Corequisite: Students must be concurrently enrolled in MATH 3B, or have completed MATH 3B with a grade of $C$ or higher
Class Hours: 54 lecture/54 lab total
The fundamental principles of mechanics are treated within the mathematical framework of elementary differential and integral calculus. Vectors, Newton's Laws, work, energy gravitation, linear and angular momentum, rotational dynamics and motion studies are discussed.

## PHYS 4B PHYSICS (ELECTRICITY AND MAGNETISM) - 4 Units

Prerequisite: A grade of C or higher in MATH 3B or Math Placement Level 7; and a grade of C or higher in PHYS 4A
Corequisite: Students must be concurrently enrolled in MATH 4A, or have completed MATH 4A with a grade of C or higher.
Class Hours: 54 lecture/54 lab total
The fundamental principles of electricity and magnetism are treated using vector integral calculus. Topics include Coulombs Law, electric fields, potentials, Gauss' Law, Ohms Law, D-C circuits, Magnetism, Biot-Savart Law, Amperes Law, Capacitance, inductance and RC circuits.

## PHYS 4C PHYSICS (WAVES, MODERN PHYSICS \& QUANTUM MECHANICS)

 - 4 UnitsPrerequisite: A grade of C or higher in PHYS 4B, and a grade of C or higher in MATH 4A or Math Placement Level 7
Corequisite: Students must be concurrently enrolled in, or have completed MATH 4 B with a grade of C or higher
Class Hours: 54 lecture/54 lab total
The third in a three-course sequence, this course covers general properties of waves, electromagnetic waves, reflection and refraction, interference and diffraction, the special theory of relativity, the quantum nature of light and the wave nature of matter, and Schrodinger's equation.

## PHYSIOLOGY (PHY)

PHY 1 PHYSIOLOGY (formerly PHY 1/PHY 1L) - 5 Units
Grading: Pass/No Pass Option
Class Hours: 72 lecture $/ 54$ lab total
A study of cellular, tissues, and organ function in the human body. A college level course surveying the elements of human physiology in selected organ systems with an emphasis on their control and integration. The course will be presented in a lecture/discussion format with appropriate audio visual aids to emphasize selected concepts. Experiments are performed in the laboratory to illustrate functional characteristics of cells, membranes, and organ systems discussed in lecture and to provide direct experience with lab techniques, recording systems, and methods of data analysis. Some previous knowledge of anatomy and chemistry is helpful, but not required for success in the course. A prerequisite for A.D.N. and Dental Hygiene programs.

## POLITICAL SCIENCE (POLS)

POLS 1 INTRODUCTION TO POLITICAL SCIENCE - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The central emphasis of this course is upon the terms and concepts used in the field of political science. Discussion centers upon the nature of political science, the origin and nature of the State, patterns and functions of government, the nature of political ideologies, the nature of the U.S. Constitution and the basic principles of a constitution. It is recommended that students majoring in political science or other social sciences take this course. This course may be offered in a distance education format.

POLS 2 INTRODUCTION TO AMERICAN GOVERNMENT - 3 Units
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course emphasizes the machinery of government as found in the American system. It examines the Constitutional framework and the functioning of government at national, state and local levels. Political Science majors should take this course as well as POLS 1, preferably in sequence. This course satisfies the CSU requirement in U.S. Constitution and California state and local government (US-2 and US-3). This course may be offered in a distance education format.

POLS 20 POLITICS OF THE DEVELOPING WORLD - 3 Units Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course focuses on the political dynamics of selected developing nations. Major emphasis will be on problems of poverty, colonialism, comparative political structures and behavior, imperialism and international relations. Tensions in political culture between traditional and non-traditional values in contemporary developing societies will also be examined. This course may be offered in a distance education format.

## POLS 25 GLOBAL POLITICS - 3 Units

Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher; or a grade of C or higher in ESL 138; and a grade of C or higher in POLS 2 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the political, social, and economic methods and processes by which nations of the world conduct relations with each other and within a global system. Ideology, nationalism, diplomacy, warfare, and the role of international organizations will be addressed. Major events of the last two centuries and present day issues will be evaluated in the context of a global system of international relations. This course may be offered in a distance education format.

## PSYCHOLOGY (PSYC)

## PSYC 1A GENERAL PSYCHOLOGY - 3 Units

Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides an introduction to psychology as a science and as an applied field. The course provides an integration of physiological, cognitive, socialbehavioral, psychodynamic, humanistic, cultural, and evolutionary perspectives. Topics include research methods, the nervous system, perception, consciousness, learning, memory, development, motivation, emotion, intelligence, stress, personality, abnormal behavior, social behavior, and psychotherapy. This course may be offered in a distance education format.

## PSYC 5 HUMAN SEXUALITY (formerly PHY 5) - 3 Units

Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An informative course in human sexuality, including human development from conception to adulthood. The anatomy and physiology of sex as well as behavioral and social aspects of human sexuality, and myths and laws governing sexual practices will be covered. This course may be offered in a distance education format.

## PSYC 14 UNDERSTANDING HUMAN BEHAVIOR - 3 Units

Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This introductory course provides a general survey of psychological concepts, with an emphasis on applied areas of psychology. Topics include learning, development, motivation, emotions, personality, abnormal behavior, psychotherapy, stress and coping, gender and sexuality, relationships, communication, and biological and social bases of behavior. This course may be offered in a distance education format.

## PSYC 15 SOCIAL PSYCHOLOGY - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in PSYC 1A and/or SOC 1; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is a study of human interaction. The focus is on the individual within a social context. Topics such as attitude formation; conformity; obedience to authority; liking and loving; gender, age, and cultural diversity; prejudice, discrimination and stereotyping; pro-social behavior and altruism; aggression; power and leadership; groupthink and deindividuation; conflict resolution and peacemaking are explored. In addition, the research methods and theories used by social psychologists are discussed. This course may be offered in a distance education format.

PSYC 16 HEALTH PSYCHOLOGY - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in PSYC 1A; and a grade of $C$ or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the scientific and professional contributions of psychology to the areas of health and wellness including the promotion of and maintenance of health; the prevention and treatment of illness; how psychological, social, and biological factors influence one's overall state of health; understanding the roles of patients and health care providers; and the improvement of health care systems and health policy formation. Individual characteristics such as gender, culture, lifestyle, personality, and relationships and their effects on health are explored. Students pursuing psychology, health care, and/or human services as their profession will find this course beneficial. This course may be offered in a distance education format.

PSYC 17 ABNORMAL PSYCHOLOGY - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in PSYC 1A; and a grade of $C$ or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides an overview of psychological disorders, their characteristics, etiology, and treatment. The course discusses the many specific types of mental illness along with fundamental issues such as historical and modern perspectives on mental illness, diagnosis and assessment, research methods, intervention and therapies, and legal and ethical issues. This course may be offered in a distance education format.

PSYC 20 CROSS-CULTURAL PSYCHOLOGY - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in PSYC 1A; and a grade of C or higher in ENGL 280, or English Placement Level 5 or higher, or a grade of C or higher in ESL 138 Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introduction to cultural influences on human behavior, emotions and patterns of thinking, including theories, research and findings. Topics span a range of issues such as life-span development, abnormal behavior and mental health, drug use, self-concept, emotions, gender expectations and gender roles, social behavior, perception, learning, intelligence, and psychotherapy. By providing students with an understanding of cultural relativism this course will encourage them to interact with tolerance and/or appreciation in a world where there is an increasing contact among different cultures. This course may be offered in a distance education format.

PSYC 25 INTRODUCTION TO RESEARCH METHODS - 3 Units
Prerequisite: A grade of C or higher in MATH 14 and a grade of $C$ or higher in PSYC 1A
Advisory: A grade of $C$ or higher in ENGL 1A, or English Placement Level 7 Class Hours: 54 lecture total
This course surveys various psychological research methods with an emphasis on research design, experimental procedures, descriptive methods, instrumentation, and the collection, analysis, interpretation, and reporting of research data. Research design and methodology will be examined through a review of research in a variety of the sub-disciplines of psychology.

## PSYC 41 CULTURALISOCIAL CONTEXT OF CHILDHOOD - 3 Units

Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the impact of the psychological, social, and cultural context of child development. Emphasis is given to the socialization process and to the cultural influences including ethnic identity, family relations, socioeconomic status, gender roles, peers, faith, and communities. Significant references highlight the experiences of children and their families from at least four different historically under-represented groups. This course may be offered in a distance education format.

## PSYC 46 HUMAN MEMORY AND LEARNING - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or better in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The course explores research, theories, and applications within the field of human memory, cognition and learning. Topics include: an investigation of how the human mind stores and retrieves information; the application of memory and learning principles toward improving those abilities; the evaluation of the impact of attention, prior learning, cognitive style, personality, and motivation on memory functioning; and changes in memory processes through the lifespan including recent research on topics such as Alzheimer's disease and amnesia. This course may be offered in a distance education format.

## PUBLIC SAFETY (PUBS)

PUBS 158 SCHOOL BUS DRIVER TRAINING - 2 Units (formerly EDUC 158) Grading: Pass/No Pass Option
Class Hours: 36 lecture total
The purpose of this course is to acquaint students with the laws, regulations, and operational procedures involved in becoming a licensed California school bus driver. This course meets a state-mandated classroom training requirement which a student must complete prior to behind-the-wheel training. This course does not include individual behind-the-wheel training, but will acquaint the student with laws and procedures pertaining to the correct operation of a school bus and procedures to obtain behind-the-wheel training.

PUBS 159 SCHOOL BUS DRIVER TRAINING REFRESHER - . 5 Unit (formerly EDUC 363)
Grading: Pass/No Pass Option
Class Hours: 10 lecture total
This course complies with the State mandated requirements of Education Code 40085 for drivers wishing to renew a CA Special Drivers Certificate to operate a school bus.

## REAL ESTATE (REAL)

REAL 30 REAL ESTATE PRINCIPLES - 3 Units (formerly BUSI 30)
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
This is a fundamental real estate course covering the basic laws and principles of California Real Estate. The knowledge, background, and terminology necessary for advanced study in specialized courses are covered. Designed to assist those preparing for the real estate salesperson license examination. Required for Real Estate majors and in the Real Estate Certificate Program.

REGISTERED NURSING (REGN)
See Also: HEOC and VOCN

## REGN 1 THEORETICAL FOUNDATIONS OF NURSING CARE - 6.5 Units

 (formerly REGN 60)Limitation on Enrollment: Students must be enrolled in the nursing program Corequisite: Students must be concurrently enrolled in REGN 2
Class Hours: 117 lecture total
In this first course leading to Registered Nursing licensure, the theoretical foundation is built by the student for application in the clinical area of adult and elderly adult medical-surgical nursing. The learner is studying the underlying theories and principles of fundamental nursing care and is introduced to concepts of medicalsurgical nursing, which are demonstrated in the corequisite clinical course, REGN 2 Clinical Foundations of Nursing Care. The learner expands on prerequisite course work to ensure a safe foundation for clinical practice. The student demonstrates critical thinking through application of the nursing process. Fundamental physical health assessment is emphasized and therapeutic communication is applied in patient and family interactions. Wellness is promoted through the patient education process.

## REGN 2 CLINICAL FOUNDATIONS OF NURSING CARE - 5.5 Units (formerly REGN 61) <br> Limitation on Enrollment: Students must be enrolled in the nursing program

 Corequisite: Students must be concurrently enrolled in REGN 1Note: All students participating in clinical rotations must submit proof of immunizations, TB clearance, and physical examination; pass a drug screening and a background check; and, have current certification in cardiopulmonary resuscitation (CPR) for the health professional according to established program process prior to going into clinical facilities. Students are financially responsible for meeting these requirements.
Class Hours: 297 clinical total*
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
The first clinical course leading to Registered Nursing licensure finds the student building a safe foundation for nursing care with basic nursing skill demonstration in the Clinical Skills Laboratory. Successful completion of basic nursing skills as vital signs, bathing, skin care, mobility, and bowel care are then applied to patient care in the hospital setting. The Clinical Skills Laboratory is utilized continuously throughout the course for more complex fundamental skills as medication preparation and administration, urinary catheterization, and sterile technique. Application of the theory presented in the co-requisite course, REGN 1 Theoretical Foundations of Nursing Care, finds the student caring for adult and elderly adult medical-surgical patients. The student organizes nursing care through the nursing process; demonstrates effective communication; and maximizes opportunities for patient education. Simulation lab activity is used to enhance theory application to the care of medical-surgical patients.

REGN 10 THEORETICAL CONCEPTS OF MEDICAL SURGICAL NURSING I6.5 Units (formerly REGN 70)

Prerequisite: A grade of $C$ or higher in each of the following courses: REGN 1 and REGN 2
Corequisite: Students must be concurrently enrolled in REGN 11 and REGN 12 Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process. Class Hours: 117 lecture total
REGN 10 is a required prerequisite for REGN 20 and REGN 21. REGN 10 is a required course for the Associate Degree Nursing program at Shasta College. This course is one of three Corequisite courses that make up the second semester of the Associate Degree Nursing program. Building upon the content of REGN 1 and REGN 2, the students will expand their knowledge of medical surgical nursing. Foundational information regarding disease process, etiology, pathophysiology, and clinical manifestations begin each unit of study. Then, utilizing a nursing process matrix, medical surgical content is discussed in relationship to assessment, diagnosis, planning, nursing interventions, and evaluation. Independent, dependent, and collaborative nursing interventions are explored.

## REGN 11 CLINICAL CONCEPTS OF MEDICAL SURGICAL NURSING I4.5 Units (formerly REGN 71)

Prerequisite: A grade of $C$ or higher in each of the following courses: REGN 1 and REGN 2
Corequisite: Students must be concurrently enrolled in REGN 10 and REGN 12 Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 243 clinical total*
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
REGN 11 is a required prerequisite for REGN 20 and REGN 21. REGN 11 is a required course for the Associate Degree Nursing program at Shasta College. This course is one of three co-requisite courses that make up the second semester of the Associate Degree Nursing program. Building upon the content of REGN 1 and REGN 2, the students will expand the fundamental clinical nursing skills they mastered. Students will have a variety of patient assignments on the medical floor, surgical floor, neurology floor, orthopedic floor, operating room and emergency room. Students will have assignments in specialty areas as available, such as the pre-anesthesia surgical suite and respiratory therapy. Clinical skills will include receiving report, organizing their patient care, delegation, assessments, education, documentation, medication administration, intravenous therapy, blood administration, TPN/Lipid administration, capillary blood glucose measurement, and analyzing daily labs. A heavy focus is on improving objective and subjective nursing assessment skills. Students will progress from providing care for a single patient to providing care to two increasingly complex patients. Emphasis is placed on the integration of theory and the nursing process into the clinical setting by use of clinical papers, medical record review, and clinical conferences.

## REGN 12 ASSESSMENT CONCEPTS OF MEDICAL SURGICAL NURSING -

 1 Unit (formerly REGN 72)Prerequisite: A grade of $C$ or higher in each of the following courses: REGN 1 and REGN 2
Corequisite: Students must be concurrently enrolled in REGN 10 and REGN 11 Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 54 lab total*
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
REGN 12 is a required prerequisite for REGN 20 and REGN 21 and is a required course for the Associate Degree Nursing program at Shasta College. This course is one of three co-requisite courses that make up the second semester of the Associate Degree Nursing program. Building upon the content of REGN 1 and REGN 2 the students will expand the basic assessment skills they mastered. Clinical Skills Lab activities focus on detailed assessment skills. These skills include subjective and objective assessment activities. Subjective assessment skills include taking a complete patient history and use of open-ended, closed-ended, and probing questions to explore key areas in more depth. Objective assessment skills include inspection, auscultation, percussion, palpation, and the use of specialized equipment. A key focus is how to individualize assessments based upon patient diagnosis and significant patient data. High fidelity simulation will be used to allow interactive system based case study activities. Students will utilize an electronic documentation system.

REGN 20 THEORETICAL CONCEPTS OF FAMILYIMATERNAL-CHILD NURSING AND MEDICAL SURGICAL NURSING II - 7 Units (formerly REGN 90)
Prerequisite: A grade of $C$ or higher in each of the following courses: REGN 10, REGN 11 and REGN 12
Corequisite: Students must be concurrently enrolled in REGN 21
Class Hours: 126 lecture total
REGN 20 is a required course for the Associate Degree Nursing program at Shasta College and a required prerequisite for REGN 33 and REGN 34 . This course is one of two corequisite courses that make up the third semester of the Associate Degree Nursing program. Building upon the content of REGN 10 and REGN 11 and REGN 12, the students will expand their knowledge of medical surgical nursing and examine the fundamentals of obstetrical and pediatric nursing. Concepts emphasized include family, communication, health promotion, illness prevention, teaching, cultural sensitivity, growth and development, nursing process, critical thinking, legal-ethical issues and advocacy.

## REGN 20X SELECT THEORETICAL CONCEPTS OF FAMILYI MATERNALCHILD NURSING AND MEDICAL SURGICAL NURSING II (NON-DEGREE) - 4 Units (formerly REGN 90XIREGN 91X)

Corequisite: Students must be concurrently enrolled in REGN 21X
Limitation on Enrollment: Students must be enrolled in the 30 -unit option program Note: This is the course for the non-degree, 30 -unit option student. If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 72 lecture total
REGN 20X is designed for the Licensed Vocational Nurse enrolled in the 30-uinit non-degree program. It is a required prerequisite course for REGN 33X, and REGN 34 X . This course is one of two corequisite courses that make up the 30-unit option program. The students will expand their knowledge of medical surgical nursing and examine complications in obstetrical and pediatric nursing. Concepts emphasized include family, communication, health promotion, illness prevention, teaching, cultural sensitivity, growth and development, nursing process, critical thinking, legalethical issues and advocacy.

## REGN 21 CLINICAL CONCEPTS OF FAMILYIMATERNAL-CHILD AND

MEDICAL SURGICAL NURSING II - 5 Units (formerly REGN 91)
Prerequisite: A grade of C or higher in each of the following courses: REGN 10, REGN 11 and REGN 12
Corequisite: Students must be concurrently enrolled in REGN 20
Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 270 clinical total*
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
REGN 21 is a required course for the Associate Degree Nursing program at Shasta College and a required prerequisite for REGN 33 and REGN 34. This course is one of two corequisite courses that make up the third semester of the Associate Degree Nursing program. Building upon the content of REGN 10, REGN 11 and REGN 12, the students will expand the fundamental clinical nursing skills they mastered. Students will have a variety of patient assignments on the obstetrical, pediatric, medical, surgical, oncology, and orthopedic floors with special assignments in the OB clinic, Shasta College preschool, home care agencies, the emergency department and pre-anesthesia unit. Clinical skills will include receiving report, organizing their patient care, assessments, documentation, medication administration, intravenous therapy, venapuncture, blood administration, TPN/Lipid administration, accuchecks, and analyzing daily labs. Students will progress from providing care for a single patient to providing care to up to three increasingly complex patients. Emphasis is placed on the integration of theory and the nursing process into the clinical setting by use of organizational tools, clinical papers, a nursing care plan, chart review, and clinical conferences.

## REGN 21X CLINICAL CONCEPTS OF FAMILY/MATERNAL-CHILD AND MEDICAL SURGICAL NURSING II (NON-DEGREE) - 4 Units (formerly REGN 90X/REGN 91X) <br> Corequisite: Students must be concurrently enrolled in REGN 20X

Limitation on Enrollment: Students must be enrolled in the 30-unit option program Note: This is the course for the non-degree, 30 -unit option student. If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process
Class Hours: 216 clinical tota
REGN 21X is designed for the Licensed Vocational Nurse enrolled in the 30-unit non-degree program. This course is one of two corequisite courses that make up the first semester of the 30 -unit option non-degree program. The students will expand the fundamental clinical nursing skills they mastered. Students will have a variety of patient assignments on the obstetrical, pediatric, medical, surgical, oncology, and orthopedic floors with special assignments in the OB clinic, Shasta College preschool, home care agencies, the emergency department and pre-anesthesia
unit. Clinical skills will include receiving report, organizing their patient care, assessments, documentation, medication administration, intravenous therapy, venapuncture, blood administration, TPN/Lipid administration, accuchecks, and analyzing daily labs. Students will progress from providing care for a single patient to providing care up to three increasingly complex patients. Emphasis is placed on the integration of theory and the nursing process into the clinical setting by use of organizational tools, clinical papers, a nursing care plan, chart review, and clinical conferences.

## REGN 33 THEORETICAL CONCEPTS OF MENTAL HEALTH, COMMUNITYBASED NURSING \& MEDICAL SURGICAL NURSING III - 6 Units (formerly REGN 30/31; 80/81)

Prerequisite: A grade of $C$ or higher in each of the following courses: REGN 20 and REGN 21
Corequisite: Students must be concurrently enrolled in REGN 34 Class Hours: 108 lecture total
REGN 33 is one of the final required courses for the Associate Degree Nursing program at Shasta College and one of two co-requisite courses that comprise the fourth semester of the Associate Degree Nursing Program. The course provides the conceptual basis of nursing care for patients in high acuity medical surgical, mental health and community-based settings. The emphasis of this course is on complex medical surgical conditions, fundamentals of mental health, community health nursing, fundamental concepts of nursing leadership, legal-ethical issues, current trends in practice, preparation for and successful completion of the licensing examination, and professional career development. The nursing process and critical thinking skills are emphasized. Students use the nursing process and critical thinking to plan, implement, and evaluate the acute and rehabilitative care of complex medical surgical and mental health patients. In addition to on-campus meetings, a portion of the course communication and activities will take place via the internet. Students will need access to a computer with Internet access.

## REGN 33X THEORETICAL CONCEPTS OF MENTAL HEALTH, COMMUNITYBASED NURSING \& MEDICAL SURGICAL NURSING III (NON-DEGREE) - 6 Units (formerly REGN 30X/31X; 80X/81X)

Prerequisite: A grade of $C$ or higher in each of the following courses: REGN 20X and REGN 21X
Corequisite: Students must be concurrently enrolled in REGN 34 X
Limitation on Enrollment: Students must be enrolled in the 30-unit option program Note: This is the course for the non-degree, 30 -unit option student. Class Hours: 108 lecture total
REGN 33 X is one of the final required courses for the Associate Degree Nursing program at Shasta College and one of two co-requisite courses that comprise the fourth semester of the Associate Degree Nursing Program. The course provides the conceptual basis of nursing care for patients in high acuity medical surgical, mental health and community-based settings. The emphasis of this course is on complex medical surgical conditions, fundamentals of mental health, community health nursing, fundamental concepts of nursing leadership, legal-ethical issues, current trends in practice, preparation for and successful completion of the licensing examination, and professional career development. The nursing process and critical thinking skills are emphasized. Students use the nursing process and critical thinking to plan, implement, and evaluate the acute and rehabilitative care of complex medical surgical and mental health patients. In addition to on-campus meetings, a portion of the course communication and activities will take place via the internet. Students will need access to a computer with internet access.

## REGN 34 CLINICAL CONCEPTS OF MENTAL HEALTH, COMMUNITY-BASED NURSING \& MEDICAL SURGICAL NURSING III - 6 Units (formerly REGN 32, REGN 82)

Prerequisite: A grade of C or higher in each of the following courses: REGN 20 and REGN 21
Corequisite: Students must be concurrently enrolled in REGN 33
Note: If not previously completed, all students participating in clinical rotations must submit proof of immunizations, current CPR certification, TB screening, physical examination, drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 324 clinical total*
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
REGN 34 is a required course for the Associate Degree Nursing program at Shasta College and one of two co requisite courses that comprise the fourth semester of the Associate Degree Nursing Program. Building upon the content of REGN 20 and 21 students expand previously learned clinical nursing skills to become increasingly independent. Students have assigned patients in a variety of clinical settings. For example, clinical rotations may include acute care, critical care, rehabilitation, mental health, and community health. Each student will spend 120 hours in a preceptorship during the semester. The preceptorship is the capstone clinical project of the semester. Emphasis is placed on the integration of theory and the nursing process in the clinical setting through the use of clinical papers, clinical conferences, group projects, and nursing care plans. In addition to on-campus meetings and clinical rotations, a portion of the course communication and activities will take place via the Internet. Students will need access to a computer with Internet access.

## REGN 34X CLINICAL CONCEPTS OF MENTAL HEALTH, COMMUNITY-BASED NURSING \& MEDICAL SURGICAL NURSING III (NON-DEGREE) 6 Units (formerly REGN 32X, REGN 82X)

Prerequisite: A grade of C or higher in each of the following courses: REGN 20X and REGN 21X
Corequisite: Students must be concurrently enrolled in REGN 33X
Limitation on Enrollment: Students must be enrolled in the 30-unit option program Note: This is the course for the non-degree, 30 -unit option student. If not previously completed, all students participating in clinical rotations must submit proof of immunizations, current CPR certification, TB screening, physical examination, drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 324 clinical total
REGN 34X is a required course for the Associate Degree Nursing program at Shasta College and one of two co requisite courses that comprise the fourth semester of the Associate Degree Nursing Program. Building upon the content of REGN 20 and 21 students expand previously learned clinical nursing skills to become increasingly independent. Students have assigned patients in a variety of clinical settings. For example, clinical rotations may include acute care, critical care, rehabilitation, mental health, and community health. Each student will spend 120 hours in a preceptorship during the semester. The preceptorship is the capstone clinical project of the semester. Emphasis is placed on the integration of theory and the nursing process in the clinical setting through the use of clinical papers, clinical conferences, group projects, and nursing care plans. In addition to on-campus meetings and clinical rotations, a portion of the course communication and activities will take place via the Internet. Students will need access to a computer with Internet access.

## RUSSIAN (RUSS)

Two years of high school foreign language with grades of " C " or better is equivalent to one semester of foreign language at Shasta College.

## RUSS 1 ELEMENTARY RUSSIAN - 5 Units

Class Hours: 90 lecture total
This course is designed to give the student training in pronunciation, essentials of grammar, reading, writing and speaking in Russian. The student is also introduced to the customs and culture of the Russian people.

## RUSS 2 ELEMENTARY RUSSIAN - 5 Units

Prerequisite: A grade of C or higher in RUSS 1, or Foreign Language Placement Level 2 or higher
Class Hours: 90 lecture total
This course is a continuation of RUSS 1. There is continued emphasis on listening to and reading Russian (the receptive skills) and on speaking and writing Russian. Students expand their language skills and vocabulary. Also students improve the ability to ask and answer questions and to discuss daily life, current events, travel, and leisure time activities. In the process of learning the language, the student is introduced to the culture and people of Russia, its history, literature, art, architecture, music and ballet.

## RUSS 3 INTERMEDIATE RUSSIAN - 5 Units

Prerequisite: A grade of C or higher in RUSS 2 or Foreign Language Placement Level 3 or higher
Class Hours: 90 lecture total
Designed for those who have had previous training in the Russian language. Review of grammar and sentence patterns with increased emphasis on speaking and useful patterns of the language. Students will read excerpts from works of Russian authors, study the culture of Russian speaking people, produce translations of various selections and develop their own writing skills.

## RUSS 4 INTERMEDIATE RUSSIAN - 5 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in RUSS 3 or Foreign Language Placement Level 4
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher Class Hours: 90 lecture total
The fourth semester of Russian language study emphasizes conversation, literature, and composition. Review of grammar, syntax, and morphology is grounded in communicative contexts and in the study of literature, culture, and historical events significant to Russian speakers. Reading selections include Russian fiction, poetry, theatre, and journalism.

## SIGN LANGUAGE (SL)

Refer to American Sign Language - ASL

## SKILLS DEVELOPMENT (SDEV)

## SDEV 301 PRE-GED TEST PREPARATION - 0 Units

Advisory: English Placement Level 2 or higher
Class Hours: 54-108 lab total
This is a course to prepare the student at the 6th- to 8th-grade reading level for GED (General Educational Development Test) level work and to enable students to apply the knowledge gained to real-life situations. Course content includes skill building
and test-taking practice in the areas of reading, writing, social studies, science and mathematics. The purpose of this class is to provide the necessary foundation for the student to tackle GED-level work.

SDEV 302 GED TEST PREPARATION - 0 Units
Advisory: A grade of C or higher ENGL 260 or English Placement Level 3 or higher Class Hours: 54-108 lab total
This is a course to prepare the student to pass the General Educational Development (GED) Test and to enable students to apply the knowledge gained to real-life situations. Course content includes skill building and test-taking practice in the areas of reading, writing, social studies, science and mathematics. The purpose of this class is for the student to successfully pass all five parts of the GED 2002 examination.

## SOCIOLOGY (SOC)

## SOC 1 INTRO TO SOCIOLOGY - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the basics of sociology--the study of society. Sociology examines the interactions among social institutions, cultures, groups, and individuals. This course will focus on how unequal power relations organize the social world and shape individual lives, and how individuals negotiate their lives in different social and economic contexts. The course will examine a broad array of topics using a variety of theoretical perspectives and sociological research methods. The primary goal of this course is to recognize how people's experiences are shaped by social forces and reshaped through human action. This course may be offered in a distance education format.

## SOC 2 SOCIAL PROBLEMS - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines several social problems from a sociological perspective. This approach makes two major assumptions. First, individuals are products of their social environment. Questions such as who we are, what we believe, what we strive for, and how we feel about ourselves, etc. have to be addressed by analyzing the society in which we live. This requires the use of the "Sociological Imagination" or looking at human attitudes, behaviors and feelings in the context of the social forces and institutional arrangements that shape them. Second, because sociology considers social structures responsible for social problems, we need to adapt a critical stance towards all social forms. This approach will help foster a more critical sociological approach to social problems. This course may be offered in a distance education format.

## SOC 15 SOCIOLOGY OF MASS MEDIA - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the central role media plays in daily life. Starting from a microsociological standpoint, students will examine how knowledge and experiences are increasingly mediated by the mass media in its various forms. The course also explores the effect of media, including television, radio, newspapers, and the Internet, on social institutions which in turn permeate and shape public policy, the economy, education, and even the family. The course will examine ways in which mass media contributes to social/cultural power and stratification and will use the "process of mutual determination" to examine the relationship between media, individuals, and society. This course may be offered in a distance education format.

## SOC 22 SOCIOLOGY OF AGING - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total
The consequences of demographic, economic, and social trends associated with population aging are challenging policy makers around the globe. This course will examine these processes as they affect individuals, families, and societies. Course content will examine themes surrounding aging and social policy in order to better understand the social context that contributes to enhancing or diminishing the quality of life in old age. Areas of analysis include: health care rationing, family versus government responsibility, Social Security, retirement, changing norms and values, the elderly and the life course. This course may be offered in a distance education format.

SOC 25 SOCIOLOGY OF MINORITIES - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The purpose of this course is to introduce students to the sociological study of race and ethnicity in the United States. This course will explore the relations between racial and ethnic minorities and the larger society. The histories of employment, educational options, civil and legal rights and social experiences will be viewed as they reflect race, ethnic and gender biases in our institutions. We will also focus on how different groups resisted oppression and actively shaped a more democratic America. This course may be offered in a distance education format.

## SOC 30 SOCIOLOGY OF GENDER - 3 Units

Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is an introduction to the sociological study of gender. The central themes of the course will be changes and continuities in gender roles within the U.S. and abroad, the social processes that influence our lives and gender identities, and the connections between gender, power, and inequality. As we explore these themes, we will study how culture, the economy, and the family have been pivotal sites for the maintenance, reproduction, and change in gender roles in both the U.S. and abroad. We will pay special attention to the ways in which race, class and sexual orientation intersect processes of gender relations and social change. This course may be offered in a distance education format.

SOC 70 SOCIAL WELFARE - 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The basic purpose of this course is to provide students with an introduction to social services and the social work profession, including social work fields of practice, social service agencies, and levels of social work practice. The course will focus on the critical examination of social welfare issues, including a historical perspective, contemporary issues, structures of the current system, and alternative concepts. Discussions will examine direct services (micro level practice) and administration/planning (macro level practice). An overview of social service work will include discussion of the following areas: health care, children and family services, substance abuse, schools, mental health, the elderly, developmental disabilities, criminal justice, and the workplace. This course may be offered in a distance learning format.

## SPANISH (SPAN)

Two years of high school foreign language with grades of "C" or better is equivalent to one semester of foreign language at Shasta College.

## SPAN 1 ELEMENTARY SPANISH - 5 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 90 lecture total
This introductory course is designed to give the student thorough and intense practice in speaking and listening to Spanish, and reading and writing in Spanish, with special emphasis on grammar and pronunciation. The course will focus on communicative competence in situations relating to daily routines, home life, college life, and everyday activities such as meeting and describing people; finding out about schedules, directions, and locations; discussing weather, eating, and holidays. Students are introduced to the culture of Spanish-speaking people in general and to specific customs and cultural characteristics of various Spanish-speaking countries.

## SPAN 2 ELEMENTARY SPANISH - 5 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in SPAN 1, or Foreign Language Placement Level 2 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 90 lecture total
This course is a continuation of SPAN 1. There is continued emphasis on listening to and reading Spanish (receptive skills) and on speaking and writing Spanish. Students expand their language skills and vocabulary. Students also improve their ability to ask and answer questions and to discuss current events, health, food, travel, leisure time and activities, and shopping. The course will focus on communicative competence in situations relating to the aforementioned areas and also to art, music, commerce, family, and the future. Students learn to express themselves in Spanish regarding these topics as they relate to the culture of Spanish-speaking people in general and to some specific Spanish-speaking countries.

SPAN 3 INTERMEDIATE SPANISH - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in SPAN 2, or Foreign Language Placement Level 3 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher Class Hours: 54 lecture total
This course is a continuation of SPAN 2. SPAN 3 includes a compact, detailed review of first-year material as well as new vocabulary and expansion of first-year principles, development of more advanced communication and composition skills, and verb tenses and structures. This course offers extensive conversational exercises with stress on correct pronunciation. The course also includes an introduction to Spanish and Latin American literature and further discussion of the arts in general, particularly as they relate to the culture of the Spanish-speaking countries.

SPAN 4 INTERMEDIATE SPANISH - 3 Units (P/NP Option)
Prerequisite: A grade of C or higher in SPAN 3, or Foreign Language Placement Level 4
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher Class Hours: 54 lecture total
This course is a continuation of SPAN 3. SPAN 4 (along with SPAN 3) comprises a compact, detailed review of first-year material as well as new vocabulary and expansion of first-year principles, development of more advanced communication and composition skills, and a more comprehensive overview of verb tenses and structures. This course offers extensive conversational exercise with stress on correct pronunciation. The course also includes further discussion of Spanish and Latin American literature and of the arts in general, particularly as they relate to the culture of Spanish-speaking countries.

## SPAN 19 SPANISH CONVERSATION AND CULTURE - 3 Units

Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in SPAN 2, or Foreign Language Placement Level 3
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher Class Hours: 54 lecture total
Intense practice in the spoken language with the objective of increasing vocabulary and improving speech patterns as well as pronunciation by giving oral presentations, conversing, and analyzing Spanish phonology.

SPAN 20 SPANISH CONVERSATION AND CULTURE II - 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in SPAN 3, or Foreign Language Placement Level 4
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
Continued intense practice in spoken Spanish with the objective of facilitating development of better conversation and communication skills, increasing vocabulary, and improving speech patterns and pronunciation by giving oral presentations, conversing, and analyzing Spanish-speaking culture.

## SPAN 151 SPANISH VOCABULARY (formerly SPAN 151AB) - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher Class Hours: 54 lecture total
This course will help those students who want to learn Spanish vocabulary and grammar in order to facilitate very basic communication in everyday workplace and social situations. Students are introduced to pronunciation and minimum essentials of Spanish grammar. This course is a survey of basic vocabulary, numbers (11000), some vocabulary useful in the workplace, practice of simple phrases, intense practice in comprehending simple phrases and practice in responses to simple phrases given within the context of a professional or vocational situation.

SPAN 155 SPANISH FOR MEDICAL PROFESSIONALS - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course is designed to help health care workers in the United States assess, treat, reassure and educate their Spanish-speaking clients/patients. This course facilitates better communication between health care providers and the growing Spanish-speaking population in the United States and in Northern California. Course topics include the building of the patient-practitioner relationship, understanding the patient's chief complaint, taking medical history and current symptoms, and learning about cultural factors affecting the health care provided to Spanish speakers and the workers that care for them.

## SPAN 197 SPECIAL TOPICS IN SPANISH - . 5 - 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher Class Hours: 9-54 lecture total
This course is designed to meet the needs of professionals who work with Spanish speakers. Essentials of Spanish pronunciation and grammar are introduced, along with commands, the present indicative, and the two past tenses. Communicative skills will be developed through role-plays of realistic situations, practiced dialogues, and study of specialized vocabulary.

## SPEECH

See CMST - Communication Studies

## STUDENT DEVELOPMENT (STU)

## STU 1 COLLEGE SUCCESS - 3 Units (formerly GS 1)

Class Hours: 54 lecture total
This course is designed to assist students in obtaining the skills and knowledge necessary to reach their educational objectives. Topics covered include: motivation and discipline, memory development, time and stress management, career and transfer planning, and a wide variety of study skills and techniques for success.

## STU 50 GETTING CONNECTED: AN ORIENTATION TO COLLEGE -.5-1 Unit (formerly GS 50)

Class Hours: 9-18 lecture total
This course includes an orientation to the educational opportunities, programs and services available at Shasta College as well as the procedures for accessing them. In the one unit version of the course, students will deepen their sense of educational purpose and commitment through developing effective "Education Plans" and building "Connections for Success." This course is appropriate for all students. It fulfills the orientation requirement for priority registration.

STU 70 COLLEGE STUDY AND LEARNING SKILLS - 1 Unit (formerly ENGL 171)
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
Designed to help non-traditional and traditional students to develop learning skills and to achieve the greatest amount of competency in their college class work. The class will help the student to take notes effectively, read and study course materials, prepare for exams, and complete written assignments.

## STU 90 CAREER CHOICE - 1 Unit (formerly GS 90)

Grading: Pass/No Pass Option
Class Hours: 18 lecture total
A course designed for students who are undecided about their educational and/or career goals. Through a series of group exercises, and career development testing, students learn to identify personal values, interests, skills, aversions, and personality patterns and understand how they relate to choices in the world of work. Students learn to access occupational information, develop decision-making skills and set career goals.

STU 92 WORKSITE READINESS (formerly GS 92) - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
Designed to prepare students to be successful on the job. Students will gain insight into employer expectations, effective workplace attitudes, developing job-related communication skills, conflict resolution, and managing stress. Emphasis will be placed on maximizing learning opportunities in the workplace, the development of effective networking skills, personal skills-acquisition plan, and building a job search campaign. This course may be offered in a distance education format.

## STU 310 GENERAL TUTORING LABISUPERVISED TUTORING - 0 Units (formerly GS 310) <br> Class Hours: TBA

This course provides tutoring assistance to increase the probability of a student's successful completion of his or her educational objectives. Upon faculty/counselor referral, student will receive tutoring in designated subject areas in various tutoring labs on campus. Cumulative progress and attendance records will be maintained for this non-credit, open entry course. Hours will vary depending upon individual student's needs.

## THEATRE ARTS (THTR)

## THTR 1 INTRODUCTION TO THEATRE ARTS - 3 Units

Class Hours: 54 lecture total
This course is a survey of Theatre Arts including dramatic structure, performance style, plays, terminology, history, criticism, and stagecraft. Students will develop an appreciation for the theatre arts through lectures, viewing, critiquing, and participating in college productions. This course fulfills the Arts requirement for General Ed transfer and is required for the Theatre Certificate.

## THTR 5 20TH CENTURY THEATRE - 3 Units

Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
This is a survey course in trends and developments of 20th Century theatre. Major playwrights (Ibsen, Chekhov, Miller), personalities (Craig, Artaud), and theatre innovators (Brecht) of this century will be examined. Mainstream and radical influences as well as the impact of technology on plays and performances will be discussed. This course fulfills the Humanities requirement for General Education transfer and is required for Theatre majors.

THTR 8 THEATRE HISTORY I-3 Units
Class Hours: 54 lecture total
In this course students will investigate the history of Theatre from its origins through the $17^{\text {th }}$ Century. They will analyze plays in terms of the historical cultural, political and social context of each play. Topics include historical relevance and context, text analysis, acting style, theme, language, diction, set, audience, gender issues, special effects, cultural significance and production stylization.

## THTR 9 THEATRE HISTORY II - 3 Units

Class Hours: 54 lecture total
In this course students will read and investigate a selection of plays from the Jacobean to the Contemporary eras. They will analyze the historical context of each play and how to interpret and transform scripts for production. Topics include: historical development and context, text analysis, acting style, theme, language, diction, set, audience, gender issues, special effects, and cultural significance.

## THTR 12 ACTING FOR THE STAGE I-2 Units

Class Hours: 18 lecture/54 lab
This course teaches the fundamentals of what it is to be an actor. Topics covered include the use of senses, the voice, the body, emotions and building a character. Students participate in individual and group exercises, theatre games and acting projects. Students learn the vocabulary of acting and view/critique on-campus productions. This course is required for theatre majors; non-majors are welcome. This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

## THTR 13 ACTING FOR THE STAGE II - 2 Units

Advisory: A grade of C or higher in THTR 12
Class Hours: 18 lecture/54 lab total
This course offers detailed application of techniques explored in beginning acting. These areas include: styles, articulation, analysis of emotional content of dramatic texts, mask and movement work. In this course the voice and body are used as creative and interpretive tools. Designed for the Theatre Arts Core Program, acting and directing concentration; may not be challenged, must be taken for a grade, and is transferable. This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

THTR 20 READER'S THEATRE - 1-3 Units (formerly THTR 20AD)
Class Hours: 54-162 lab total
A course dealing with the oral presentation of literature by two or more readers. Areas of study will include character development, performance techniques, material selection, analysis and adaptation, vocalization, and interpretation of scripts. Participation in public performances on and off campus is required. Note: Since subject matter varies each time the course is taught, this course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 21 ONE-ACT PRODUCTIONS - 1-3 Units (formerly THTR 21AD)

Class Hours: 54-162 lab total
In this course, students produce and publicly perform one-act plays. Students will attend rehearsals and performances, and discuss plays as they progress. This course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 23 MAINSTAGE PRODUCTION I - DRAMA - 1-4 Units (formerly THTR 23AD)

## Class Hours: 54-216 lab total

In this course students rehearse, prepare and perform a mainstage play. Activities may include acting, stage management, backstage operations, costuming, stagecraft and front of house operations. The course is required for theatre majors, non-majors are welcome. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 24 MAINSTAGE PRODUCTION II - MUSIC - 1-4 Units <br> (formerly THTR 24AD)

Grading: Pass/No Pass Option
Class Hours: 54-216 lab total
A course which focuses on the rehearsal and performance of the musical elements of a major dramatic work. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

THTR 25 MAINSTAGE PRODUCTION II - CHOREOGRAPHY - 1-4 Units
(formerly THTR 25AD)
Grading: Pass/No Pass Option
Class Hours: 54-216 lab total
A course that teaches basic stage movement and dance for large cast plays and music theatre. Class projects and rehearsal activities will include participation in choreography in class or in theatre productions. Note: The authors, genre, and production styles will change each time this class is taught; therefore, it may be repeated three times for a maximum of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 26 MAINSTAGE PRODUCTION II - DRAMA - 1-4 Units (formerly THTR 26AD) <br> Grading: Pass/No Pass Option

Class Hours: 54-216 lab total
A course which focuses on the rehearsal and dramatic performance of a large cast dramatic work or musical. Activities may include acting, stage management, backstage operations, costuming, stagecraft and front of house operations. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

THTR 29 DIRECTING - 2 Units (formerly THTR 22EH)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
This course is designed to introduce the student to the background, function and techniques of the stage director. Included in the course will be an investigation of the principles involved in script selection and interpretation, the fundamentals of casting, rehearsal techniques, blocking, aims and conduct, rehearsal scheduling, and the preparation of a director's prompt book. Students should have previous experience in theatre performance and production. Note: This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

THTR 30 STAGECRAFT I-3 Units
Grading: Pass/No Pass Option
Class Hours: 45 lecture/27 lab total
This course focuses on the technical principles of theatrical productions. Subjects covered include the use of basic power tools, constructing and painting scenery, hanging and operating lighting instruments, and understanding backstage practices. Students will learn how to interpret theatrical construction diagrams, floor plans for stage sets, and light plots. This course is required for the Theatre Arts Certificate.

THTR 31 STAGECRAFT II - 3 Units (formerly THTR 35)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course focuses on the design, management and coordination of the technical elements of a theatrical production. Students will design stage settings, light plots, and stage properties. They will learn the duties of the stage manager and the production coordinator.

## THTR 33 STAGE MANAGEMENT - 2 Units (formerly THTR 22IL)

Grading: Pass/No Pass Option
Class Hours: 27 lecture/27 lab total
This course will introduce the student to the functions of the stage manager. Students will develop an understanding of how to coordinate a production team, including directors, designers, technicians, operators, actors and house personnel. Students will learn methods of production organization including scheduling, cueing, notating, reading floor plans, set changes, and rehearsal and performance protocols

## THTR 34 MAKEUP - 2 Units

Grading: Pass/No Pass Option
Class Hours: 27 lecture/27 lab total
This course is designed to introduce the student to the principles and practical application of stage makeup. Emphasis will be given to facial structure, character analysis, makeup selection and application, facial modeling, three-dimensional techniques, false hair and corrective makeup. The student will demonstrate his/her understanding through actual application in the classroom and as a member of a makeup crew for a specific play production, special exercise, or project. Note: This course may be repeated once for a total of two enrollments since skill development is enhanced with a successive enrollment.

## THTR 37 THEATRE MANAGEMENT - 2 Units

Class Hours: 36 lecture total
In this course students learn the business of theatre management, organization and administration. Season selection, budget, staff organization, scheduling, box office operations, promotion and publicity are among the topics covered.

THTR 41 THEATRE LABORATORY - .5-4 Units (formerly THTR 41AD) Grading: Pass/No Pass Option
Class Hours: 27-216 lab hours total
A laboratory course in which the student will received supervised practical experience and training in theatrical productions. Students may work progressively in one or more of the following areas: scenery construction, fabrication and rigging; console operations; stage management; lighting; sound; costumes; wardrobe; properties; make-up; publicity; house management; concessions, and running crews. Upon approval of the instructor, students may direct and participate in the preparation, rehearsal, and performance of student directed productions. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 42 STAGE PRODUCTION LABORATORY - .5-4 Units (formerly THTR 42AD)

Grading: Pass/No Pass Option
Class Hours: 27-216 lab total
A laboratory course in which the student will participate in one or more of the following production areas: scenery construction, set decorations, lighting, sound, costumes, properties, makeup, stage management and publicity. The course will focus on the technical requirements of a stage production. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

THTR 50 STAGE PRODUCTION - DRAMA - 1-3 Units (formerly THTR 50AD) Grading: Pass/No Pass Option Class Hours: 54-162 lab total
A production course designed to provide experience in creating public performances, including but not limited to dance, music, theatre and concerts. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 51 STAGE PRODUCTION-CHOREOGRAPHY - 1-3 Units (formerly THTR 51AD)

Grading: Pass/No Pass Option
Class Hours: 54-162 lab total
A course in class or rehearsal sessions to teach basic stage movement and dance for a stage production. Class projects will include participation in choreography in the class or in stage productions. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

THTR 52 STAGE PRODUCTION - MUSIC - 1-3 Units (formerly THTR 52AD)
Grading: Pass/No Pass Option
Class Hours: 54-162 lab total
A course in class or rehearsal sessions to teach the use of vocal and instrumental music for stage. Class projects will include participation in classroom activities and/or productions. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 60 SPECIAL PROJECTS-PRODUCTION - 1-4 Units (formerly THTR 60AD) <br> Class Hours: 54-216 lab total

A course that provides specialized training in specific areas of a current production. The focus of instruction will be in training students to perform disciplined tasks within the context of a scheduled theatrical event, e.g. special vocal skills, acting methods, stage lighting, scenography, script writing, choreography, makeup, puppetry, stagecraft, and/or other techniques needed to satisfy and complement a specific theatrical performance. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

THTR 61 COSTUMING LABORATORY - 1-3 Units (formerly THTR 22AD)
Grading: Pass/No Pass Option
Class Hours: 54-162 lab total
A course that focuses on special projects in costume building for stage productions. Students will receive special instruction in sewing techniques for the stage, pattern drawing, the costumer's function during the running of a show and costume maintenance. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

THTR 70 REPERTORY THEATRE I-1-10 Units
Class Hours: 54-540 lab total ( 54 hours per unit)
In this course students will rehearse and perform major dramatic works in a repertory theatre format. Students will participate in a theatrical company/ensemble. They will share in the preparation, rehearsal, promotion, and public performance of a series of plays, musicals, or theatrical productions. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 74 REPERTORY THEATRE - TECHNICAL - 1-10 Units

Class Hours: 54-540 lab total (54 hours per unit)
A laboratory course in which student will gain work experience and training in technical Repertory Theatre practices. Students may work progressively in one or more of the following areas: scenery construction, fabrication and rigging; console operations; stage management; lighting; sound; costumes, wardrobe; properties; make-up; publicity; house management; concessions, and running crews. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 81 INTRODUCTION TO PLAYWRITING (Drama: Play, <br> Performance and Perception) - 3 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total
An examination of the elements of the dramatic script. The course consists of four main areas of investigation: critiquing the script; playwrights; plotting and theatre conventions; creating motivated characters--heroes, heroines, villains and foils. This course will guide the student toward creating scripts and analyzing their problems and help them distinguish drama from the performed theatre, i.e., scenarios for action.

THTR 97 SPECIAL STUDIO TOPICS: THEATRE - 1-3 Units
Grading: Pass/No Pass Option
Class Hours: 54-162 lab total
This course is designed to give students studio-based instruction and experience in a variety of theatre processes and techniques not regularly covered in other theatre courses. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Theatre majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 98 SPECIAL TOPICS: THEATRE - 1-3 Units

Grading: Pass/No Pass Option
Class Hours: 18-54 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge and contemporary issues in the field of theatre. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Theatre majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 153 COMMUNITY DRAMA - 1-3 Units

Grading: Pass/No Pass Option
Class Hours: 54-162 lab total
Designed specifically for small community groups in off campus facilities, providing experience in the acting and technical production of scene, one-act, and small cast plays. Students will be involved in the staging and rehearsal of scenes and plays to be performed during class in the following areas: acting, makeup, lighting, sound, scenery development, costuming, stage management, and publicity. Students will observe rehearsals and performances and discuss plays as they progress. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## THTR 301 APPLIED THEATRE TECHNIQUES-TECHNICAL - 0 Units (formerly THTR 301AD)

Class Hours: 9-162 lab total
Course is designed to allow involvement in the production of a dramatic event for those with a particular interest in costuming, prop building, makeup, set building, sound and lighting, or other theatre related technical skills. Students will be exposed to learning new skills as well as applying skills already learned in a practical manner.

THTR 302 APPLIED THEATRE -DRAMATIC - 0 Units
Class Hours: 9-162 lab total
This course is designed to allow those interested in appearing in a dramatic presentation to become involved in a specific aspect of that production. Although new skills will be acquired, such as audition techniques, casting practices, orientation to repertory procedures, and introduction to theatre administration, the major emphasis of the class will be directed toward the preparation of a stage production.

## VOCATIONAL NURSING (VOCN)

See Also: HEOC and REGN
VOCN 160 FOUNDATIONS OF NURSING PRACTICE - 15 Units
Limitation on Enrollment: Students must be enrolled in the Vocational Nursing Program
Note: All students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 144 lecture/378 clinical total*
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
VOCN 160 is the beginning sequence of three required courses for the Vocational Nursing Program. The emphasis of this course is development of fundamental nursing skills. Theory content includes role of the vocational nurse, nursing trends, interpersonal relationships, disease processes, and pharmacology. The student practices fundamental nursing skills in the Clinical Skills Laboratory prior to clinical assignment in long-term and acute care settings.

VOCN 161 NURSING OF ADULTS - 13 Units
Prerequisite: A grade of C or higher in VOCN 160
Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 144 lecture/288 clinical total*
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
VOCN 161 is the second required course in the Vocational Nursing Program. The emphasis of this course is towards application of the nursing process in acute care settings. Theory content includes care of patients with common medical surgical problems. The student develops competence in administration of medications and varied therapeutic skills to assigned patients with safety and increasing confidence. Assignments include practice in the Clinical Skills Laboratory and medical, surgical, and orthopedic areas in acute care settings. Students may be assigned in such optional areas as operating room and recovery room for follow-through experience with their assigned surgical patients and in an ambulatory center.

## VOCN 162 NURSING OF ADULTS AND CHILDREN - 13 Units (formerly VOCN 161B)

Prerequisite: A grade of C or higher in VOCN 161
Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 144 lecture/288 clinical total*
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
VOCN 162 is the last required course in the Vocational Nursing Program. The emphasis of this course is on principles of nursing care for maternity, newborn, pediatric patients, and continuing care of patients with more complex medical surgical problems. Supervision/leadership skill behaviors are introduced in the longterm care setting. Assignments include clinical experience in the acute care, longterm care, home-care setting, medical, surgical, obstetrics (including nursery), pediatrics, acute progressive care, and outpatient clinics.

## WATER TREATMENT TECHNOLOGY (WTT)

## WTT 177 INTRODUCTION TO WASTEWATER TREATMENT - 3 Units (formerly NR 177)

Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Designed to provide the student with a general background in the design, operation, and maintenance of water and wastewater treatment plants and to prepare the experienced operator for certification examinations. This course is directed to primarily towards entry-level operators, industrial waste inspection, lab technicians, maintenance personnel, and related occupations. Explains how and why treatment of wastewater protects the environment.

WTT 180 INTRODUCTION TO WATER TREATMENT TECHNOLOGY - 3 Units (formerly NR 180)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course is designed to provide the student with a general background in the design, operation, and maintenance of water treatment plants and prepares the experienced operator for the State Water Treatment Plant Operator Certification examination.

WTT 181 INTERMEDIATE WATER TREATMENT TECHNOLOGY - 3 Units (formerly NR 181)
Advisory: A grade of C or higher in WTT 180
Class Hours: 54 lecture total
This course covers water supply and treatment, historical development of water quality control practices, water sources, public health aspects of water supply, chemical treatment, and evaluation of the various treatment processes. This course will prepare the experienced operator for certification examinations.

## WTT 183 INTERMEDIATE WASTEWATER TREATMENT - 3 Units (formerly NR 183)

Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course will provide the student with a general background in advanced wastewater treatment processes, and prepare the operator for advanced certification examinations.

## WTT 184 SMALL WATER SYSTEMS AND DISTRIBUTION - 3 Units

 (formerly NR 184)Advisory: A grade of C or higher in WTT 180
Class Hours: 54 lecture total
This course is designed to provide the student with a general background in the design, operation, and maintenance of small water systems and water distribution systems, and prepares the experienced operator for the State Water Treatment Plant and Distribution Operator Certification Examination.

## WTT 186 ADVANCED WASTEWATER TREATMENT - 3 Units <br> (formerly NR 186 and NR 182)

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in WTT 177 or a grade of C or higher in WTT 183 Class Hours: 54 lecture total
This course is designed to provide the student with a more in-depth background in the design, operation, and maintenance of wastewater treatment plants and to prepare the experienced operator for higher-level certification examinations.

## WELDING TECHNOLOGY (WELD)

WELD 56 WELDING - 2 Units (formerly IART 56)
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 18 lecture/54 lab total
A course in general welding includes both oxyacetylene and arc welding in the four positions on ferrous and non-ferrous metals and their alloys. Repair welding, welding symbols, trade terminology, care and use of various types of welding equipment and safety procedures.

WELD 70 BEGINNING WELDING - 3 Units
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 36 lecture/72 lab total
A beginning course designed for the student interested in acquiring basic welding skills to be used in a trade or service occupation. Emphasis is placed on oxyacetylene and arc welding in all positions.

## WELD 73 STRUCTURAL STEEL METAL FABRICATION - 3 Units

 (formerly WELD 173)Advisory: A grade of C or higher in WELD 70 or WELD 170 or AGMA 44 or previous welding experience
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 36 lecture/72 lab total
A beginning course in metal fabrication, blueprint reading and sketching, coupled with layout and production welding, and the use of metal fabrication equipment. The class stimulates on-the-job welding situations. Note: This course may be repeated two times for a maximum of three enrollments due to the need to improve skills to become a journeyman fabricator.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

WELD 94 WORKSITE LEARNING FOR WELDING TECHNOLOGY - 1-8 Units Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## WELD 130 GENERAL WELDING/SHOP AND METALS - 1 Unit (formerly WELD 130AB and WELD 230AB) <br> Grading: Pass/No Pass Option

Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 54 lab total
Designed for students interested in the fundamentals of metalworking. Subject areas and activities will emphasize metal identification, proper and safe use of hand tools, power tools, bench metals, welding, and machine tool operations. Note: This course may be repeated three times for a total of four enrollments since the course content varies and skills are enhanced by supervised repetition and practice.** **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## WELD 170 INTRODUCTION TO ARC WELDING - 3 Units

Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 36 lecture/72 lab total
A course to advance beginning arc welding skills with an emphasis on SMAW. Power sources, electrode identification, weldability of metals, joint design, air arc, and oxyacetylene cutting, and introduction to GTAW and GMAW are covered in this course. Course activities include learning to weld stringer and weave beads, butt and fillet welds in flat, horizontal, vertical, and overhead positions.

WELD 171 INTERMEDIATE ARC WELDING - 3 Units (formerly WELD 171AB) Advisory: A grade of C or higher in WELD 170 or entry-level trade experience
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 36 lecture/72 lab total
A course to advance arc welding skills with emphasis on vertical and overhead welding. Course activities prepare the student for weld certification and advanced arc welding classes. Weld symbols, aluminum arc and cast iron welding are covered in this course.

## WELD 172 SHEET METAL FABRICATION (RESIDENTIAL AND COMMERCIAL)

 - 3 UnitsNote: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 36 lecture/72 lab total
This is an introductory-level residential and commercial sheet metal working course. It is intended for the carpentry, welding, aviation mechanics, or metal working job entry-level student who needs to be familiar with sheet metal practices. Course work will include classroom and laboratory instruction in sheet metal equipment, parallel and transition layout and duct construction, duct installations, residential and commercial duct systems and materials as related to heating and cooling systems, flashings and flashing installations.

WELD 174 STRUCTURAL STEEL MIG WELDING - 3 Units
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 36 lecture/72 lab total
GMAW (gas metal arc welding structural steel) stresses certification code welding on plate and structural steel in all positions. Course instruction and related information will include gas metal and flux core arc welding equipment and welding variables, shielding gases, troubleshooting equipment and weld defects, welder certification and welding codes, weld symbols, structural steel identification and welding procedures, and metallurgy.

WELD 175 TIG WELDING - 3 Units
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 36 lecture/72 lab total
TIG (Tungsten Inert Gas) is an inert gas welding course also known as Heliarc which covers aluminum, mild steel, stainless steel, magnesium and copper welding. The course consists of welding on flat and pipe stock in all positions. Course content will include metals identification and weld symbols. Welding exercises are stressed to develop welding skills.

## WELD 176 GMAW MIG WELDING (LIGHT GAUGE AND NONFERROUS METAL) - 3 Units

Grading: Pass/No Pass Option
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 36 lecture/72 lab total
This course emphasizes developing MIG welding skills on light gauge steel, stainless, and aluminum. Related instruction will include ferrous and non-ferrous metal identification and their welding characteristics, MIG welding applications and variables, inert shielding gases and mixtures, troubleshooting MIG equipment and welds, and spot welding.

## WELD 178 PIPE WELDING FUNDAMENTALS - 3 Units

Advisory: A grade of C or higher in WELD 170 or trade welding experience
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 36 lecture/72 lab total
A fundamental course in pipe welding with emphasis on open groove pipe joints using oxyacetylene, arc and inert gas welding processes in all positions.

WELD 182 ADVANCED ARC WELDING - 1 Unit
Advisory: A grade of C or higher in WELD 171 or equal trade welding experience Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 72 lab total
An advanced course designed to prepare students to pass structural steel certification in vertical and overhead positions. SMAW (stick) and FCAW (MIG) processes will be used. The goal of this class is to pass the AWS D1.1 welding certificate test. Strict adherence to the testing procedures will be followed. Completion of the class does not guarantee AWS certification unless welding procedure qualification tests are passed. Note: This course may be repeated one time for a total of two enrollments since the course content varies and skills are enhanced by supervised repetition and practice.

WELD 184 ADVANCED GTAW (TIG) WELDING - 1 Unit
Prerequisite: A grade of C or higher in WELD 175
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 72 lab total
An advanced welding laboratory class with emphasis on vertical and overhead welding. This class is designed for the student interested in improving his/her beginning skills in order to prepare for entry into the job force as a TIG welder. Note: This course may be repeated one time for a total of two enrollments since the course content varies and skills are enhanced by supervised repetition and practice.

## WELD 186 ADVANCED PIPE WELDING - 2 Units

Prerequisite: A grade of C or higher in WELD 178
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 108 lab total
An advanced pipe welding class with emphasis on ASME, AWS, or API certification. Course instruction includes welding codes, pipe classification and identification. Completion of the class does not guarantee certification unless welding procedure qualification tests are passed. Note: This course may be repeated one time for a total of two enrollments since the course content varies and skills are enhanced by supervised repetition and practice.

WELD 188 ADVANCED GMAW (MIG) WELDING - 1 Unit
Prerequisite: A grade of C or higher in WELD 174 or WELD 176
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 72 lab total
An advanced welding laboratory class with emphasis on vertical and overhead welding. This class is designed for the student interested in improving his/her beginning skills in order to prepare for entry into the job force as a GMAW (MIG) welder. Note: This course may be repeated one time for a total of two enrollments since the course content varies and skills are enhanced by supervised repetition and practice.

## WELD 197 SPECIAL TOPICS IN WELDING TECHNOLOGY - .5-2 Units

Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of Welding Technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Welding Technology majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## WORKSITE LEARNING (WSL)

WSL 94 GENERAL WORKSITE LEARNING - 1-6 Units
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The General Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student. A faculty member supervises the WSL course to ensure that the work experience is of educational value. The course stresses good work habits and meeting of SCANS competencies through actual on the job performance. A student may earn up to 6 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 6 units may be earned in a single semester.**
**Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

## ZOOLOGY (ZOOL)

ZOOL 1 GENERAL ZOOLOGY - 4 Units
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Class Hours: 36 lecture/108 lab total
The study of the major divisions of the animal kingdom with emphasis on the origin, adaptations, functions, and development.

## ZOOL 15 FIELD HERPETOLOGY OF NORTHERN CALIFORNIA - 1 Unit

 (formerly ZOOL 105)Grading: Pass/No Pass Option
Note: Field trips are an integral part of the course and are therefore mandatory. Class Hours: 18 lecture/9 lab (field trip) total
Designed for individuals interested in natural history and field biology by providing the student with a basic awareness of the diversity of amphibians and reptiles that inhabit the local area. Lectures will feature slides, diagrams, maps and other media to present concepts in anatomy, physiology, behavior, systematics and distribution. The students will use various capture techniques and learn to record data and observations in a notebook format while in the field. Moderately rigorous hiking may be involved.

## ZOOL 63 FIELD ORNITHOLOGY OF NORTHERN CALIFORNIA - 1 Unit (formerly ZOOL 163)

Grading: Pass/No Pass Option
Class Hours: 18 lecture/16 lab (Four 4-hour field trips required)
Designed for birdwatchers and open to students to fulfill part of the general education requirements in science. Lectures will feature films, slides, records, maps, and other media to present concepts in anatomy, physiology, behavior and distribution. Students will use various field techniques for studying bird populations.

## Chapter 7 - Student Rights and Responsibilities

## Academic Freedom: Board Policy 4030

Controversial issues and divergent viewpoints have existed among men throughout the history of civilization. Only in a constitutional republic such as ours has a high degree of freedom of expression been permitted. There must be freedom of the student and teacher to present their viewpoints in and out of the classroom. American democracy is strong enough to stand on its own merits and to survive criticism and comparison with any system so long as its advantages and virtues are not deliberately slighted in such comparisons. However, an atmosphere of responsibility to the students, the College, the community and the nation must accompany these freedoms. To carry out their mutual responsibilities to each other and to ensure these principles of academic freedom, the Board of Trustees, the administration and faculty agree to support certain guiding principles and procedures as set forth below.

## 1. The faculty member shall:

(a) Be entitled to freedom of expression in teaching his/her subjects in the classroom. He/she shall encourage fair examination of controversial questions. He/she shall encourage students, by word and example, to form their own opinions based upon critical judgment and documented facts. In his/her presentation of subject matter to his/her students, he/she shall distinguish between objective facts and his/her personal evaluation of facts.
(b) Be supported in his/her right to participate in legal political activities of the community, state and nation during off-duty hours. No disciplinary action may be brought to coerce him/her for political purposes. (Education Code 13004, 13754). He/she shall permit no outside political activities to interfere with his/her academic duties. He/she should always make clear to audiences that the opinions expressed regarding outside political activities are his/her own and not to be taken as necessarily representing the policies of the College. He/she should refrain from making irresponsible statements to any group.
(c) Be ever cognizant that it is illegal to advocate the overthrow of the Government by force (Education Code 9455). He/she should make a clear distinction between the description of such philosophies as might fall in that category and the advocacy of such philosophies.
(d) Emphasize the need for maintaining a level of individual integrity and responsibility consistent with good community relations of the College, when associated with student activities that reach beyond the classroom.
(e) Provide a fair platform for the presentation of facts when outside speakers are invited to the classroom on the campus. Such speakers should be free to speak on topics which are relevant to questions being discussed in the classroom or campus situation. It may, at times, be desirable for the faculty members and administration to provide information and viewpoints to rebut opinions expressed by such speakers in order to encourage critical analysis of the questions discussed.
2. Classroom policy regarding the discussion of controversial issues shall be:
(a) That free classroom expression by the instructor and the students be encouraged so long as topics are pertinent to the course being taught. The instructor is careful to be accurate, responsible and aware of the immaturity of some of the students in presenting and discussing controversial topics.
(b) That the instructor avoids prejudicial indoctrination. He/she points out to students that there may be other recognized views, and he/she carefully distinguishes between personal opinion and documented fact. He/she avoids imposing his/her opinion regarding controversial topics through the pressure of his/her authority in the classroom.
(c) That discussion of religious concepts is free from restraint so long as it is an integral part of the subject being taught and does not become sectarian indoctrination.
(d) That the teacher respects the student's right to differ in opinion in any discussion of controversial issues, without penalty, attack, or reflection in grading.

## Academic Honesty

Academic dishonesty is the fraud and deception for the purpose of improving a grade or obtaining course credit, and includes all student behavior intended to gain or provide unearned academic advantage by fraudulent and/or deceptive means.

The student has the full responsibility for the content and integrity of all academic work submitted. Ignorance of a rule does not constitute a basis for waiving the rule or the consequences of that rule. Students unclear about a
specific situation should ask their instructors, who will explain what is and is not acceptable in their classes.

Violation of this policy will result in appropriate disciplinary action. Specific examples of academic dishonesty include but are not limited to:

## Taking Information

a. Copying graded homework assignments from another student.
b. Working together on a take-home test or homework when not specifically permitted by the instructor.
c. Looking at another student's paper during an examination.
d. Looking at text or notes during an examination when not specifically permitted by the instructor.
e. Accessing another student's computer and using his/her data as one's own.

Providing Information
a. Giving one's work to another to be copied or used in an oral presentation.
b. Giving answers to another student during an examination.
c. After taking an examination, informing a student enrolled in a later course section of questions that appear on the examination.
d. Providing a term paper to another student.
e. Taking an examination, writing a paper, or creating computer data or artistic work for another.

Plagiarism
a. Failing to give credit for ideas, statement of facts, or conclusions derived by another author. Failure to use quotation marks when quoting directly from another, whether it be a paragraph, a sentence, or a part thereof.
b. Submitting a paper acquired from a "research" or term paper service.
c. Copying another person's assignment and handing it in as one's own.
d. Giving a speech or oral presentation written by another and claiming it as one's own work.
e. Claiming credit for artistic work done by someone else, such as a music composition, photos, a painting, drawing, sculpture, or design.
f. Presenting another's computer data as one's own.

Other Academic Dishonesty
a. Planning with one or more fellow students to commit any form of academic dishonesty together.
b. Having another student take one's examination or do one's computer data or lab experiment.
c. Lying to an instructor to increase a grade.
d. Submitting papers or speeches that are substantially the same for credit in two different courses without prior approval of the instructors involved.
e. Altering a graded work after it has been returned, then submitting the work for re-grading unless specifically allowed by the instructor.
f. Removing tests from the classroom without the approval of the instructor, or stealing tests.
g. Copying computer software from a floppy disk or a hard drive unless specifically allowed by the instructor.

## Academic Renewal: Board Policy 4240

A student may petition the Scholastic Standards Committee to have up to 30 units of "D" or "F" grades removed from the computation of his/her grade point average for students who need a means of tempering their previous academic record so they may successfully accomplish an academic goal. (Title 5, Section 55044). Contact the Admissions and Records Office for petition forms. Updated 1/16/08

## Attendance Policy

Attendance policies at Shasta College are based on the belief that students can profit from college only if they attend regularly and are adequately prepared for their classes.

Students are expected to attend all classes. A student who fails to attend the first class meeting of a course without notifying the instructor may be dropped from the class. In addition, an instructor may drop a student for excessive absences/lack of participation. IT IS ALWAYS THE STUDENT'S RESPONSIBILITY TO OFFICIALLY DROP OR WITHDRAW FROM THE CLASS. Students who fail to file the necessary withdrawal forms, even though they stop attending class, or fail to pay registration fees, will be assigned a course grade.

## Equal Opportunity

Shasta College employs policies and procedures to strengthen and guarantee the premise of equal opportunity for all. Specifically, the College:

1. Practices nondiscrimination in academic programs, employment, promotion, transfer and assignment on the basis of color, ethnic group identification, race, religion, national origin, gender, sexual orientation, age, physical and mental disability, veteran and/or marital status.
2. Reviews its policies and procedures to preclude the possibility of unintentional discrimination against women, minorities, individuals with disabilities and others.
3. Maintains the policy that unless specifically exempted by statute, every course, course section or class, the average daily attendance of which is to be reported for state aid, whenever offered shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established pursuant to Chapter II, Div. 2, Part IV, Title 5, of the California Code of Regulations, commencing with Section 51820.

## Extenuating Circumstances (Withdrawal)

Students who must withdraw from college after the fourteenth week of class ( $75 \%$ of the term for classes less than a full term) because of extenuating circumstances, verifiable cases of accidents/illnesses, or other circumstances beyond the control of the student, may petition for authorized withdrawals from their classes. Petitions are available in the Admissions and Records Office.

## Smoking and Tobacco Use Restrictions: <br> Board Policy 3555

1. No use of tobacco products is permitted within any college owned and/or leased facility.
2. No use of tobacco products is permitted on the grounds of any collegeoperated athletic field or facility.
3. No use of tobacco products is permitted in college-owned vehicles.
4. The sale of tobacco products on all college-owned and/or leased property is prohibited.
5. Use of tobacco products on college-owned or leased property is permitted only in special designated areas which are set aside for smoking purposes and are removed from all buildings and major pathways.

## Standards of Conduct: Board Policy 5500

Students and visitors to a Shasta College campus are expected to obey all California State laws and all Federal laws that pertain to behavior on a college campus. The following regulations represent reasonable standards of conduct for students and visitors, and shall be followed at all times on a Shasta College campus. Generally, Shasta College's jurisdiction and discipline shall be limited to conduct that occurs on Shasta College premises or that is related to school activities.

Rules and Regulations: Any student found to have committed the following misconduct is subject to the disciplinary sanctions outlined in Board Policy, Section 3550 and 5520.

1. Acts of dishonesty, including but not limited to the following:
a. Cheating, plagiarism, or other forms of academic dishonesty. Academic dishonesty is the willful and intentional fraud and deception for the purpose of improving a grade or obtaining course credit, and includes all student behavior by fraudulent and/or deceptive means. The student has the full responsibility for the content and integrity of all academic work submitted.
b. Furnishing false information to any Shasta College official, faculty member or office.
c. Forgery, alteration or misuse of any Shasta College document, record or instrument of identification.
d. Tampering with the election of any Shasta College-recognized student organization.
2. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, other Shasta College activities including its public-service functions on or off campus, or other authorized non-Shasta College activities when the act occurs on Shasta College premises.
3. Physical abuse, verbal abuse, threats, intimidation, harassment, coercion and/or conduct which threatens or endangers the health and safety of any person.
4. Sexual harassment as defined by law or by regulation of the college or District.
5. Attempted or actual theft of and/or damage to property of Shasta College or property of a member of the Shasta College community or other personal or public property, or knowingly receiving stolen district property or private property on campus.
6. Engaging in harassing or discriminatory behavior based on disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law.
7. Hazing, defined as an act that endangers the mental or physical health or safety of a student, or which destroys or removes public or private property for the purpose of initiation, admission into, affiliation with or as a condition for continued membership in a group or organization.
8. Failure to comply with direction of Shasta College officials or law enforcement officers acting in the performance of their duties, and/or failure to identify oneself to one of these persons when requested to do so.
9. Unauthorized possession, duplication or use of keys to any Shasta College premises or unauthorized entry to or use of Shasta College premises.
10. Violation of published Shasta College policies, rules or regulations.
11. Violation of federal, state or local law on Shasta College premises or at Shasta College sponsored or supervised activities.
12. Use, possession or distribution of narcotic or other controlled substances except as expressly permitted by law.
13. Public intoxication or use, possession or distribution of alcoholic beverages except as expressly permitted by law and Shasta College regulations.
14. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals including but not limited to any facsimile firearm, knife, explosive or weapon on Shasta College premises.
15. Participation in a campus demonstration that disrupts the normal operations of Shasta College and infringes on the rights of other members of the Shasta College community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area; intentional obstruction that unreasonably interferes with freedom of movement, either pedestrian or vehicular, on campus.
16. Obstruction of the free flow of pedestrian or vehicular traffic on Shasta College premises or at Shasta College sponsored or supervised functions. The use of bicycles, roller blades and skateboards is not permitted in heavy traffic areas or in buildings.
17. Conduct that is disorderly, lewd or indecent; habitual profanity or vulgarity; breach of peace; or aiding, abetting or procuring another person to breach the peace on Shasta College premises or at functions sponsored by or participated in by Shasta College.
18. Theft or other abuse of computer time and network resources, including but not limited to:
a. Unauthorized entry into a file to use, read or change the contents, or for any other purpose.
b. Unauthorized transfer of a file.
c. Unauthorized use of another individual's identification and password.
d. Unauthorized use of phone and electronic devices such as radios, etc.
e. Use of computing facilities to interfere with the work of another student, faculty member or Shasta College official.
f. Use of computing facilities to send obscene or abusive messages.
g. Use of computing facilities to interfere with normal operations of Shasta College computing systems.
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Student Standards of Conduct (continued):
19. Abuse of the judicial system, including but not limited to:
a. Failure to obey the summons of a Shasta College official.
b. Falsification, distortion or misrepresentation of information before a hearing officer.
c. Disruption or interference with the orderly conduct of a judicial proceeding.
d. Institution of a judicial proceeding knowingly without cause.
e. Attempting to discourage an individual's proper participation in, or use of, the judicial system.
f. Attempting to influence the impartiality of a member of a judicial body prior to and/or during the course of the judicial proceeding.
g. Failure to comply with the sanction(s) imposed under the Student Code.
h. Influencing or attempting to influence another person to commit an abuse of the judicial system.
20. Willful or persistent smoking in any area where smoking is prohibited by lawful authority.
21. Littering of any kind.
22. Misrepresentation of oneself or of an organization to be an agent of Shasta College.
23. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any district policy or administrative procedure.
24. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.

Students who engage in any of the above are subject to the procedures outlined in Administrative Procedures 5520.

## Student Computer Technology Access

This is to communicate what other users, instructors, and the District expect of students when using college computer technology and facilities. Failure to conform to these stipulations may result in disciplinary action. Violations of regulations in the use of computer technology will be addressed in accordance with Shasta College Standards of Conduct (BP 5500) and Sanctions (BP 5505), available for reference in the College Catalog or by requesting a copy from Student Services.

Access to computing resources is a privilege. Use of any Shasta College computer system constitutes agreement to comply with Shasta College Administrative Procedures for Responsible Computing. Computer technology and facilities are provided for the purpose of completing academic requirements. The District may access, review, copy and disclose information entered or retained in computer technology and communications resources.
A. Students may use the technology and facilities to:

1. Complete course assignments;
2. Conduct academic research;
3. Communicate with faculty and students.
B. User Responsibilities. User responsibilities include, but are not limited to:
4. Using only their own designated ID, passwords/PIN, and accounts, and keeping IDs, passwords/PIN, and account information confidential. It is recommended that users change their passwords/PIN periodically;
5. Using software and electronic materials, including shareware, in accordance with copyright, trademark, and licensing agreements and restrictions;
6. Accurately identifying and representing themselves in electronic messages, files, and transactions;
7. Saving all work on a flash drive or other removable storage media and not on the hard drive unless instructed to do so by their instructor;
8. Allowing lab technicians to scan removable media before it is inserted into or otherwise connected to the computer as a precaution to insure the safety of the computers;
9. Asking appropriate Shasta College personnel for assistance if unfamiliar with the system software.
C. Prohibitions. Prohibitions include, but are not limited to:
10. Circumventing or attempting to circumvent local, network, or remote security measures;
11. Unauthorized use of accounts, access codes, passwords, or identification numbers;
12. Violating copyrights, trademarks, and/or license agreements;
13. Copying software that has not been placed in the public domain and distributed as freeware; inspecting, changing, altering, copying, or distributing proprietary data programs, files, disks, or software without authorization;
14. Accessing, using or copying another user's account, ID number, password, electronic files, data, or e-mail without prior authorization; or allowing such use by others;
15. Falsely identifying and/or representing oneself in the use of computer technology and communications resources;
16. Altering or attempting to alter system software;
17. Altering or attempting to alter system hardware without Technology Support approval;
18. Damaging equipment, data, software, software protection, encryption or restriction on applications and files, including introducing invasive or destructive programs (such as viruses, worms, and Trojan horses);
19. Modifying or attempting to crash or hack into computer technology or communications resources;
20. Accessing or attempting to access restricted portions of any operating system or security software;
21. Installing or removing software;
22. Using computer technology and/or communications resources for private commercial purposes;
23. Using District computer technology and communications resources in any unlawful manner including fraudulent, threatening, libelous, obscene, or harassing communications; procuring, or distributing obscene or pornographic material.

## Student Designated Free Speech Area:

Board Policy 3900
Students, employees, and members of the public shall be free to exercise their rights of free expression, subject to the requirements of this policy.

District property is a non-public forum, except for those areas that are designated public forums available for the exercise of expression by students, employees, and members of the public. The Superintendent/President shall enact such administrative procedures as are necessary to reasonably regulate the time, place, and manner of the exercise of free expression in the designated public forums.

The administrative procedures established by the Superintendent/President shall not prohibit the right of students to exercise free expression including, but not limited to, the use of bulletin boards or the distribution of printed materials or petitions in those parts of the college designated areas generally available to students and the community, and the wearing of buttons, badges, or other insignia.

Speech shall be prohibited that is defamatory, obscene according to current legal standards or which so incites others as to create a clear and present danger of the commission of unlawful acts on District property or the violation of District policies or procedures, or the substantial disruption of the orderly operation of the District.

Nothing in this policy shall prohibit the regulation of hate violence directed at students in a manner that denies their full participation in the educational process (Education Code Section 66301(e)), so long as the regulation conforms to the requirements of the First Amendment to the United States Constitution, and of Section 2 of Article 1 of the California Constitution. Students may be disciplined for harassment, threats, or intimidation unless such speech is constitutionally protected.

## Student Discipline:

Board Policy/Administrative Procedure 5520

## (Formerly BP/AP 5505, 5510 and 5515)

BOARD POLICY 5520: (Board approved 4/13/11)
The Superintendent/President shall establish procedures for the imposition of student discipline in accordance with the requirements of due process as provided by applicable federal and state laws and regulations.
The Dean of Students will serve as the Discipline Officer unless a different official is so designated by the Superintendent/President.
The disciplinary procedures shall identify potential disciplinary actions, including but not limited to the removal, suspension or expulsion of a student.
The Board of Trustees shall consider any recommendation from the Superintendent/President for expulsion and revoking or withholding a degree or certificate. The Board of Trustees shall hear the matter in closed session unless the student requests the matter be heard in open session. Final action by the Board on any expulsion shall be taken in open session.
The disciplinary procedures shall be made available to students through the college catalog, the District website and other similar means.

ADMINISTRATIVE PROCEDURE 5520: (Board approved 4/13/11)
The purpose of these administrative procedures is to provide a means to address violations of the Standards of Conduct set forth in Board Policy 5500 (BP 5500).

These administrative procedures are not intended to substitute for criminal or civil proceedings that may be initiated by other agencies and will be used in a fair and equitable manner, and not for purposes of retaliation. These procedures are not considered a legal proceeding. Therefore, students do not have a right to counsel during a student disciplinary hearing.

## I. DEFINITIONS:

Discipline Officer: The Dean of Students or such other official so designated by the Superintendent/President.

District: The Shasta-Tehama-Trinity Joint Community College District.
School Day: Any day during which the District is in session and regular classes are held, excluding Saturdays and Sundays.

Student: Any person enrolled in any program at the District, either full-time or part-time. Persons who withdraw after allegedly violating the Standards of Conduct are considered "students" for the purposes of these procedures. The Standards of Conduct apply to all locations and activities of the District, including online courses and District-sponsored events.

Instructor: Any academic employee of the District in whose class a student subject to discipline is enrolled, or counselor who is providing or has provided services to the student, or other academic employee who has responsibility for the student's educational program.
Educational Administrator: Any administrator who provides leadership and direction for the operations of the District whose responsibilities include supervision of managers, staff or instructors and the management of the institutional relations among students, faculty and staff.

Expulsion: Permanent separation of the student by the Board of Trustees from all courses and activities offered by the District.

Good Cause: Any offense defined by Education Code section 76033 and such other causes as set forth in the Standards of Conduct.

Hearing Authority: The Vice President of Student Services or such other official so designated by the Superintendent/President and with responsibility for the first appeal level.

Removal from Class: Exclusion of the student by an instructor for the day of the removal and the next class meeting.

Reprimand (Written or Verbal): An admonition to the student to cease and desist from conduct determined to violate the Standards of Conduct.
Immediate Interim Suspension (Education Code Section 66017): The immediate suspension of a student when the Discipline Officer or any educational administrator concludes that immediate suspension is required to protect students or others from injury, to protect property, or to ensure the maintenance of order at the District provided that a reasonable opportunity for a hearing be afforded the suspended student within ten (10) days.
Short- Term Suspension: Exclusion of the student for good cause from one or more classes, school activities, and/or all District facilities for a period of up to five (5) school days.

Long-Term Suspension: Exclusion of the student for good cause from one or more classes, school activities and/or all District facilities for more than five (5) school days.

Withdrawal of Consent to Remain on Campus: Withdrawal of consent by the Discipline Officer for any person to remain on campus in accordance with California Penal Code Section 626.4 where the Discipline Officer has reasonable cause to believe that such person has willfully disrupted the orderly operation of the campus.

## II. EXPECTED STUDENT CONDUCT

The Standards of Conduct are set forth in BP 5500 and apply to conduct that relates to District activity or District attendance, including conduct that occurs while at District campuses or facilities, or at District sponsored activities, including before classes begin, after classes end, during the academic year, and during periods between terms of actual enrollment. The Standards of Conduct shall apply even if the student withdraws from school while a disciplinary matter is pending.

## III. SANCTIONS

One or more of the following sanctions may be imposed upon any student found to be in violation of the Standards of Conduct:

1. Warning: Verbal notice to the student by the Discipline Officer that the student is violating or has violated the District's Standards of Conduct and that a continuation of the specified conduct by the student may lead to further disciplinary action. The warning will be documented by the Discipline Officer and may become part of the student's record for a period of up to one year.
2. Reprimand: A written or verbal admonition to the student by the Discipline Officer to cease and desist from conduct determined to violate the Standards of Conduct. A record that a reprimand has been given shall be documented and may become part of a student's record for a period up to one year.
3. Disciplinary Probation: A written reprimand by the Discipline Officer for violation of a specific provision of the Standards of Conduct that invokes probation for a designated period of time, which includes the possibility of more severe disciplinary sanctions should the student violate any of the Standards of Conduct during the probationary period.
4. Restitution: Reimbursement by the student for damage(s), injury or misappropriation of District property or to instructional materials/equipment-caused by the students' misconduct. Restitution/reimbursement may be one or more of the following: appropriate service, monetary or material replacement. Pursuant to Title 5 of the California Code of Regulations, Section 59410, students who fail to provide the required restitution will have their grades, transcripts, diplomas, and registration privileges withheld until the financial obligation to the District is satisfied. The Discipline Officer shall provide the student with an opportunity to be heard prior to the imposition of a restitution order.
5. Removal from Class or Instruction-Related Activity: Any instructor may order a student removed from his or her class or instructional activity for the day of the removal and the next class or activity meeting. The instructor shall immediately report the removal to the Discipline Officer. The Discipline Officer will arrange for a meeting with the student regarding the removal. The student shall not be allowed to return to the class or instructional activity during the period of the removal without the concurrence of the instructor. Nothing herein will prevent the Discipline Officer from further disciplinary sanctions in accordance with these procedures, and based on the facts which led to the removal. If the student removed is a minor, the Discipline Officer shall ask the parent or guardian of the student to attend a parent conference regarding the removal as soon as possible. If the instructor or the parent/guardian so requests, the Discipline Officer shall attend the conference.
6. Loss of Privileges: Denial of privileges that do not involve restrictions on class attendance for a designated period of time.
7. Residence Halls Suspension: Separation of the student from the Residence Halls for a definite period of time for violation of the Student Residential Housing Agreement or Standards of Conduct after which the student is eligible to return. Conditions for readmission to the Residence Halls may be specified.
8. Residence Halls Contract Revocation: Permanent separation of the student from the Residence Halls for continued or serious violations of the Student Residential Housing Agreement or Standards of Conduct without possibility of readmission, which may also include revoking the privilege to be in or near the Residence Halls for any reason.

Student Discipline continued on next page...

Student Discipline - Sanctions (continued):
9. District Suspension: Subject to notice and appeal hearing requirements, separation of the student for good cause from all classes, school activities and/or all District campuses for a definite period of time after which the student may be eligible to return.
10. District Expulsion: Permanent separation of the student by the Board of Trustees from all courses and activities offered by the District.
11. Revocation of Degree or Certificate: A degree or certificate awarded by the District may be revoked for fraud, misrepresentation, or other violation of District standards in obtaining the degree or certificate. Such a revocation shall be by action of the Board of Trustees.
12. Withholding of Degree or Certificate: The District may withhold awarding a degree or certificate otherwise earned until the completion of the process set forth in these procedures, including the completion of all sanctions imposed, if accusations of misconduct affect the student's entitlement to the degree or certificate.
13. Withdrawal of Consent to Remain on Campus: The Discipline Officer may notify any person for whom there is a reasonable belief that the person has willfully disrupted the orderly operation of the campus that consent to remain on campus has been withdrawn. If the person is on campus at the time, he or she must promptly leave or be escorted off campus. If consent is withdrawn by the Discipline Officer, the officer will immediately notify the Vice President of Student Services and the Superintendent/President. The person from whose consent has been withdrawn may submit a written appeal in accordance with Sections VI and VII of these procedures.

Any person as to whom consent to remain on campus has been withdrawn who knowingly reenters the campus during the period in which consent has been withdrawn, except to attend a hearing, is subject to arrest (Penal Code section 626.4).
14. Discretionary Sanctions: Work assignments, essays, service to the District, or other related discretionary assignments that are determined to be appropriate by the Discipline Officer to remedy a violation of the Standards of Conduct or that serve as an educational lesson in response to such a violation.

## IV. DISCIPLINE INVOLVING STUDENT GROUPS

Sanctions upon student groups or organizations may be imposed as follows:

1. Those relevant sanctions listed in Section III of these procedures.
2. Loss of selected rights and privileges for a specified period of time.
3. Deactivation: Loss of all privileges, including District recognition, for a specified period of time.

Accusations that a student group or organization has collectively violated the Standards of Conduct, terms that govern the group or organization, or any conditions of District operations, shall be initially reviewed by the Discipline Officer who shall have authority to impose sanctions on the group or organization.

No sanctions shall be imposed until the Discipline Officer has provided the group or organization with a written statement of the accusations and given the group or organization an opportunity to respond.

## V. RECORDS OF DISCIPLINARY ACTION

In accordance with Education Code section 76220, the District shall establish, maintain and destroy student records according to regulations adopted by the Board of Governors of the California Community Colleges. The Discipline Officer will create a record of disciplinary actions, along with relevant supporting documents and evidence. This record shall be maintained as a confidential student disciplinary record and may not be released without the permission of the student, except as permitted by law. The student shall have the right to inspect the record and to challenge the contents. Disciplinary records shall be retained in a manner consistent with state law.

In accordance with Education Code section 76234, whenever there is included in any student record, information concerning any disciplinary action taken by the District in connection with any alleged sexual assault or physical abuse or any conduct that threatens the health and safety of the alleged victim, the alleged victim of the sexual assault or physical abuse shall be informed within three (3) days of the results of any disciplinary action by the District and the results of any appeal.

## VI. SUSPENSION/EXPULSION PROCEDURES

The following procedures shall be followed before any suspension or recommendation of expulsion except in the event that an emergency/interim suspension is imposed as set forth herein.
A. Administration. The Discipline Officer shall administer these procedures and take appropriate action, subject to the approval of the District Superintendent/President and the Governing Board if required herein or otherwise by law.
B. Reporting of conduct. Alleged student misconduct shall be reported to the Discipline Officer.
C. Investigation. Upon receiving a report of alleged student misconduct, the Discipline Officer shall initiate an investigation.
D. Notice. Before imposing this discipline, the Discipline Officer shall make reasonable efforts to give the student written notice of the reason for the proposed disciplinary action. If the student is a minor, the Discipline Officer shall also notify the parent or guardian of the investigation and charges.
E. Opportunity to be Heard. Within a reasonable period of time following the delivery to the student of the notice referred to above, the Discipline Officer shall offer the student an opportunity to attend a meeting at which time the student may present a rebuttal to the accusation or otherwise offer relevant comment on the proposed suspension or recommendation of expulsion. If the student fails to arrange such a meeting (or fails to appear for a meeting the student arranged), the decision of the Discipline Officer shall be made without input from the student.
F. Determination after Meeting. The Discipline Officer shall decide whether or not to proceed with the proposed suspension or recommendation of expulsion after hearing the student's explanation and considering all of the information. The Discipline Officer shall send the student a written notice of the decision via personal delivery or certified mail to the student's last known address, as set forth in subsection $(\mathrm{H})$ below.
G. Notice to the District's Hearing Authority. The Discipline Officer shall report any disciplinary action imposed to the District's Hearing Authority (the Vice President of Student Services or such other official so designated by the Superintendent/President.)
H. Short-Term Suspension Notification. The Discipline Officer shall send the student a written notice of determination within three (3) school days after the meeting described in subsection (E). The notice shall inform the student of the decision and the length of the suspension, if any. The notice shall also inform the student that the decision is final. The notice shall be hand delivered or sent via certified mail to the student's last known address.
I. Long-Term Suspension and/or Recommendation for Expulsion Notification. The Discipline Officer shall send the student a written notice of determination within five (5) school days after the meeting described in subsection (E). The notice shall be hand delivered or sent via certified mail to the student's last known address. The notification shall include:

1. A statement of the charges, the reason for the suspension or recommended expulsion, and a description of facts related to the misconduct, including the evidence against the student, the date of the incident(s), time of the incident(s), and location of the offense(s);
2. A copy of the Standards of Conduct;
3. An explanation that the student who has been suspended is entitled to appeal the decision and has a right to an appeal hearing ("appeal hearing"). The notification shall also state that a request for an appeal hearing shall be filed within five (5) school days of the receipt of the notification. Mailed notice is presumed received three calendar days after mailing. The written request for an appeal hearing must be submitted to the Hearing Authority, and must cite the specific ground(s) for the appeal (from those listed below), and provide information which substantiates the ground(s) on which the appeal is being made. The failure to request a hearing in a timely manner shall constitute a waiver of the right to a hearing;
Continued on next page...

Student Discipline - Suspension/Expulsion Procedures (continued):
4. Grounds for appeal: A student may appeal the decision of the Discipline Officer on the grounds that:
i. Fair consideration was not provided to the student (i.e., there is evidence that some aspect of the meeting described in subsection (E) was prejudicial, arbitrary, or capricious); or
ii. New and significant information, not reasonably available at the time of the initial meeting, has become available; or
iii. The sanction or remedy imposed is not in due proportion to the nature and seriousness of the offense. Any evidence supporting these grounds must be included in the request for an appeal hearing.
5. A statement that the student has the right to be accompanied at an appeal hearing" by an on-campus advisor of his or her choice. If the student decides to be accompanied by an advisor, the name and address of that advisor shall be submitted to the Hearing Authority at the time the appeal is filed;
J. Schedule of Hearing. The Hearing Authority shall schedule an appeal hearing no later than ten (10) school days after a timely written request for a hearing is received by the District.

## VII. HEARING AUTHORITY'S APPEAL PROCEDURES

A. Sanctions recommended by the Discipline Officer may be appealed, by the student charged, to the Hearing Authority (the Vice President of Student Services or such other official so designated by the Superintendent/President). The appeal must be in writing and received by the Hearing Authority within five (5) school days of receipt of notification of right to appeal.
B. Upon receipt from the student of a request to appeal within the time stated above, the Hearing Authority will review the facts of the Discipline Officer's findings and recommended sanctions. Sanctions recommended by the Discipline Officer may or may not be suspended until such time as the appeal hearing is held.
C. If after the review, the Hearing Authority determines that an appeal is warranted then the appeal hearing will be conducted with the student within ten (10) school days of receipt of the request to appeal.
D. Additional parties and/or witnesses to the violation may be requested to meet with the Hearing Authority to verify information obtained from the hearing held with the Discipline Officer.
E. The Hearing Authority may uphold, modify or reject any or all disciplinary sanctions recommended by the Discipline Officer. If the Hearing Authority modifies or rejects any or all sanctions recommended, the Hearing Authority shall prepare a new written decision which contains specific factual findings and conclusions. The Hearing Authority's decision shall be sent via certified or registered mail to the student's last known address. The Hearing Authority shall report all suspensions, recommendations of expulsion, and recommendations to revoke or withhold a degree or certificate to the Superintendent/President within five (5) school days.
F. If the student fails to attend the appeal hearing without prior notice of cancellation, or without rescheduling another hearing, the Hearing Authority may uphold, modify, or reject the disciplinary sanctions recommended by the Discipline Officer without input from the student. Sanctions imposed could result in suspension, expulsion, or revoking or withholding a degree or certificate.
G. In cases not resulting in long-term suspension, expulsion, or revoking or withholding of a degree or certificate, the decision of the Hearing Authority shall be final.
H. In cases where a recommendation of long-term suspension, expulsion, or the revoking or withholding of a degree or certificate has been rendered, notice shall be forwarded immediately to the Superintendent/President.

## VIII. EMERGENCY INTERIM SUSPENSION

A. The Discipline Officer may impose an emergency/summary suspension if deemed warranted. It is an extraordinary measure and shall be utilized only when necessary to protect individuals from injury or death, or damage to property, or to ensure the maintenance of order pending an opportunity for the student to be heard.
B. A meeting shall be provided to the student within five (5) school days of an emergency/summary suspension (Education Code section 66017). The procedures set forth in sections VI and VII shall apply to the meeting and any appeal hearing.
C. An emergency/summary suspension shall be reported to the Board of Trustees at its next regular meeting after such suspension has been imposed.

## IX. SUPERINTENDENT/PRESIDENT

In cases where long-term suspension, expulsion, or revoking or withholding a degree or certificate is recommended, the following shall apply:
A. Long-Term Suspension: Within ten (10) school days following receipt of the recommended decision, the Superintendent/President shall render a final written decision. The Superintendent/President may uphold, modify or reject the disciplinary sanctions recommended by the Hearing Authority. If the Superintendent/President modifies or rejects the suspension recommendation, the Superintendent/President shall review the record of the hearings, and prepare a new written decision which contains specific factual findings and conclusions. The decision of the Superintendent/President shall be final except as to expulsions or revoking or withholding of a degree or certificate. The final decision shall be sent via certified or registered mail to the student's last known address. The Superintendent/President shall report all suspensions, whether short- or long-term, of any student to the Board of Trustees in closed session at its next regular meeting after the suspension has been imposed.
B. Expulsion or Revoking or Withholding a Degree or Certificate: Within ten (10) school days following receipt of the recommended decision, the Superintendent/President shall render a written recommended decision to the Board of Trustees. The Superintendent/President may uphold, modify or reject the disciplinary sanctions recommended by the Hearing Authority. If the Superintendent/President modifies or rejects the expulsion recommendation, or the recommendation to revoke or withhold a degree or certificate, the Superintendent/President shall review the record of the hearings and prepare a new written decision which contains specific factual findings and conclusions. The Superintendent/President's decision shall be forwarded to the Board of Trustees.

## X. BOARD OF TRUSTEES

In cases where expulsion or revoking or withholding a degree or certificate is recommended, the following shall apply:
A. The Board of Trustees shall consider any recommendation from the Superintendent/President for expulsion and/or revoking or withholding a degree or certificate at its next regularly scheduled meeting or as soon thereafter as is practicable. The Board of Trustees shall consider an expulsion recommendation in closed session, unless the student requests the matter be heard in open session in accordance with these procedures and Education Code section 72122. The Board may expel a student for good cause when other means of correction fail to bring about proper conduct or when the presence of the student causes a continuing danger to the physical safety of the student or others (Educ. Code section 76030).
B. The student shall be notified in writing, by registered or certified mail or by personal service, at least five (5) school days prior to the meeting, of the date, time, and place of the meeting of the Board of Trustees. The student may, within forty-eight (48) hours after receipt of the notice, request that the hearing be held in open session. Even if a student has requested that the Board of Trustees hear an expulsion recommendation in open session, the Board of Trustees may deliberate in closed session in accordance with Education Code section 72122.
C. A closed hearing will be closed to everyone except the following:

1. The student charged;
2. An advisor/advocate for the student charged, if so desired. If the student chooses to be accompanied by an attorney, the student must notify the District in writing of his/her intent to bring an attorney at least two (2) school days prior to the hearing. Failure to notify the District will result in a postponement of the hearing;
3. The District Superintendent/President and/or President's designee;

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## Student Discipline - Board of Trustees (continued):

4. The Board of Trustees;
5. Counsel for the District;
6. The student's parent(s) or guardian, if the student is a minor;
7. Campus Security or such other law enforcement personnel deemed necessary for the safety of meeting participants.
D. The hearing shall be conducted in accordance with the following procedures:
8. The President of the Board of Trustee will serve as chair of the hearing, and will rule on all questions of procedure and admission of evidence.
9. Hearings need not be conducted in accordance with strict rules of evidence or the formality of a court hearing.
10. Before commencement of the hearing, the Board of Trustees shall review a description of the charges, notices, evidence, findings, and a copy of the proposed decision from the collegelevel disciplinary appeal hearing. The Board of Trustees shall consider no evidence other than that evidence received in the hearing process.
11. The District Superintendent/President or designee shall make a brief statement to the Board of Trustees, referring to relevant evidence regarding the alleged misconduct.
12. The accused student may then make a brief statement to the Board of Trustees and present any relevant evidence.
13. The statements shall be limited to five (5) minutes each.
14. Upon completion of these statements, the Board of Trustees will have an opportunity to ask questions of both the student and the District Superintendent/President or designee.
15. The Board of Trustees will conclude the hearing, dismiss the parties, and privately deliberate as to a decision.
16. The Board of Trustees shall issue a statement of decision including findings of fact and a determination that the accused student did or did not commit the act(s) charged, a finding that the student's act(s) did or did not constitute a violation of the Standards of Conduct, and a decision as to whether the expulsion proposed by the District Superintendent/President will be upheld or modified. The Board of Trustees may also recommend further investigation. Pursuant to Education Code section 72122, regardless of whether the matter is heard in open or closed session, the final action of the Board of Trustees shall be taken in open session, and the result of the action shall be a public record. The name of the student, however, shall not be released.
17. The hearing (but not the deliberations of the Board of Trustees) shall be recorded either in written format or electronically. The record shall be the property of the District. The student may read the record or listen to the tape at a mutually agreeable location at the District. An accused student may, upon request, be provided a copy of the written record or electronic recording at his or her own expense.
18. A written statement of the Board of Trustees' decision shall be sent via certified or registered mail to the student's last known address within three (3) school days after the conclusion of the hearing.
19. If the Board of Trustees' decision is unfavorable to the student, the student shall have the right to submit a written statement of his/her objections to the decision. This statement shall become a part of the student's records.
20. The decision of the Board of Trustees is final and not subject to further appeal.

## XI. NOTIFICATION

The District Superintendent/President or designee shall, upon suspension or expulsion of any student, notify the appropriate law enforcement authorities of the county or city in which the District is situated of any acts of the student that may be in violation of section 245 of the Penal Code (Education Code section 76035).

## XII. EXTENSIONS OF TIME

Calendar restraints may be extended with the agreement of both parties.

Student Equity Policy: Board Policy 5300
Shasta College attempts to ensure equal opportunity to all students and shall provide prompt review of any complaints of discrimination based on race, color, religion, sex, handicap, age, or economic conditions.

## Student Grievance Policy: Board Policy 5530

*Refer to the Board Policy for any current updates of language

## Definition of Student Grievance

For the purpose of this policy, a student grievance is defined as a claim by a student that his/her student legal rights have been adversely affected by a college decision or action. This policy is available for students who desire to pursue grievance procedures against an employee of the District.
Students may initiate a grievance action in accordance with Administrative Procedures 5425.
The student shall be entitled to representation of his/her choice, other than legal counsel, at all informal complaint meetings.
Note: The District is committed to resolving student complaints and/or grievances in a fair and equitable manner. Students should work through the District's process first before escalating issues to other agencies. Issues that are not resolved at the District level may be presented to the California Community Colleges Chancellor's Office (CCCCO) at:

## www.californiacommunitycolleges.cccco.edu/ComplaintsForm.aspx.

Note: This Policy and the related Administrative Procedure is not available for use by any student or applicant for admission who believes that he/she has been subjected to unlawful discrimination. The basis for filing a complaint of unlawful discrimination and the procedures to be used to file such a complaint are set forth in the District's Unlawful Discrimination Policy and Procedures 3430, which can be obtained in the Human Resources Office in the Shasta College Administration Building 100, Room 121, 11555 Old Oregon Trail, Redding, CA 96003 or on the District's web site at:
http://shastacollege.edu/board/adminprocedures/.

## Student Grievance Procedure

The purpose of this procedure is to provide a prompt and equitable means of resolving student grievances. These procedures shall be available to any student who reasonably believes a college decision or action has adversely affected his or her status, rights or privileges as a student.

This procedure does not apply to grade changes or to student disciplinary actions, both of which are covered under separate Board Policies and Administrative Procedures. (BP/AP 4230-Grade Changes and BP/AP 5520Student Discipline).

## Definitions:

School Day: Any day during which the District is in session and regular classes are held excluding Saturdays and Sundays.
Student: Any person currently enrolled as a student in any class or program offered by the District.

## LEVELS FOR RESOLVING A STUDENT GRIEVANCE:

## FIRST LEVEL - Informal Grievance

Any student with a grievance should first attempt to resolve the matter by means of an informal meeting with the person(s) against whom the student has the grievance. This discussion must take place within ten (10) school days of the alleged incident.

SECOND LEVEL - Informal Grievance
If the grievance cannot be resolved as specified at the first level within ten (10) school days, the grievant should contact the immediate supervisor or Dean of the appropriate department or program. This discussion must take place within ten (10) school days after contact at the second level. The Supervisor or Dean has ten (10) school days to respond to the student's grievance.

## THIRD LEVEL - Informal Grievance

If the grievance cannot be resolved at the second level within ten (10) school days, the grievant should contact the appropriate Vice President. The Vice President will review the grievance with the supervisor or administrator and attempt to resolve the grievance informally. This discussion must take place within ten (10) school days after contact at the third level. The appropriate Vice President has ten (10) school days to respond to the student's grievance.

FOURTH LEVEL - Formal Grievance
If the grievance cannot be resolved informally at the third level, the grievant will be asked to state the grievance in writing within ten (10) school days. Then a formal hearing will be scheduled within ten (10) school days of receipt of the written complaint. The employee being grieved shall have the opportunity to respond in writing. A Vice President, as appointed by the Superintendent/President, will conduct the hearing.
Continued on next page...

Levels for Resolving a Student Grievance (continued):
The hearing will include the grievant(s) and the person(s) grieved against. Each shall be entitled to:

1) Representation of his/her choice, including legal counsel when mutually agreed;
2) The right to present witnesses and evidence; and
3) The right to question opposing witnesses.

Official minutes of the hearing will be recorded, and, upon request, available to any person in attendance at the hearing. The Vice President as appointed by the Superintendent/President shall have ten (10) school days after the date of the hearing to render a written decision.

FIFTH LEVEL - Formal Grievance
If the grievance cannot be resolved at the fourth level within ten (10) school days, the grievant may seek a review with the District Superintendent/President. A copy of the stated grievance and minutes of the hearing, if any, will be submitted to the Superintendent/President for review. The Superintendent/President shall have ten (10) school days to render a written decision.

SIXTH LEVEL - Formal Grievance
If the grievance cannot be resolved at the fifth level within ten (10) school days, the grievant may seek a review before the District Board of Trustees at its next regularly scheduled meeting.

## Record of Grievance

A record of the grievance against an employee of the District may only be entered into an employee's personnel file in compliance with an employee's contract and the disciplinary process.

Note: The District is committed to resolving student complaints and/or grievances in a fair and equitable manner. Students should work through the District's process first before escalating issues to other agencies. Issues that are not resolved at the District level may be presented to the California Community Colleges Chancellor's Office (CCCCO) at:
www.californiacommunitycolleges.cccco.edu/ComplaintsForm.aspx.
Note: This Policy and the related Administrative Procedure is not available for use by any student or applicant for admission who believes that he/she has been subjected to unlawful discrimination. The basis for filing a complaint of unlawful discrimination and the procedures to be used to file such a complaint are set forth in the District's Unlawful Discrimination Policy and Procedures 3430, which can be obtained in the Human Resources Office in the Shasta College Administration Building 100, Room 121, 11555 Old Oregon Trail, Redding, CA 96003 or on the District's web site at: http://shastacollege.edu/board/adminprocedures/.

## Student Learning Assessment

To ensure that students at Shasta College are attaining knowledge and skills, the faculty have developed ongoing processes to assess student learning. Students should expect to participate in a wide range of assessments designed to provide useful information about programs and student services. Additionally, upon graduating or transferring from Shasta College, former students may be asked to provide feedback on their experiences at Shasta College to guide continuous program quality.

## Student Records, Directory Information and

## Privacy Rights

Reference: Education Code Sections 76200, et. Seq.; Title 5, Sections 54600, et seq.; Board Policy 5040

The Superintendent/President shall assure that student records are maintained in compliance with applicable federal and state laws relating to the privacy of student records.

Access to Records. Educational records shall be available for inspection and review, during normal working hours, by presently and formerly enrolled students. Where the record(s) may contain information concerning more than the inquiring student, only that part pertaining to the inquiring student may be revealed.

Any currently enrolled or former student of the District has a right of access to any and all student records relating to him or her maintained by the district.

No District representative shall release the contents of a student record to any member of the public without the prior written consent of the student, other than directory information as defined in this policy and information sought pursuant to a court order or lawfully issued subpoena, or as otherwise authorized by applicable federal and state laws.

Students shall be notified of their rights with respect to student records, including the definition of directory information contained here, and that they may limit the information.

Directory information shall include:

- Student participation in officially recognized activities and sports including weight, height and high school of graduation of athletic team members.
- Degrees and awards received by students, including honors, scholarship awards, athletic awards and Dean's list recognition.


## Chapter 8 - Services for Students, Special Programs and Student Life

Shasta College provides a broad spectrum of student services and activities to support the instructional program and to ensure maximum opportunity for success in the student's chosen major.

## Services for Students

## Bookstore

The College Bookstore provides essential products and services that complement the academic environment and facilitate the education process for students, faculty, staff, and alumni as well as to visitors to Shasta College. The Bookstore offers self-service and selection in specialized book departments. Several non-book departments, such as school supplies, food products, emblematic wear, sundries, and gifts are also offered.

The Bookstore is open to the public throughout the school year. The team members of the Bookstore look forward to meeting many of you personally and helping you become better acquainted with the products and services offered. It is our purpose to make your visits to the Bookstore a pleasant and beneficial experience.

During the beginning of each semester the Bookstore has extended hours. Refer to the class schedule, our web page, or please call (530) 242-7574 for more information.

Textbooks can be ordered online at www.shasta.bkstr.com.

## Career Center

The Career Center provides resources to use in making career decisions and acquiring the occupational information necessary for planning your future. Students are invited to make use of computerized career exploration resources to learn more about their interests, skills, and work values. Resources are also available to research and compare educational requirements, pay, and future outlook for various occupations. Stop by Room 126 to learn how to create your personal career profile!

## Child Care Services

Early Childhood Education
Early Headstart
Headstart-CalWorks Preschool
Shasta College Children's Campus offers several options to help meet the childcare and educational needs of families.
Go to www.shastacollege.edu/childcare/.
The Early Childhood Education Center (530) 242-7600 is a demonstration child development laboratory site providing an enrichment experience for 3,4 , and 5 -year old children. A daily fee approved by the Board of Trustees is charged for the program.

Shasta County Head Start and Early Head Start (530) 241-7951 provides an inclusive enriching program with extended day childcare from 7:30 a.m. to 2:30 p.m. Head Start/Early Head Start serves families of infant, toddlers and preschoolers aged eight weeks to five years. Enrollment priority is given to children of College CalWORKs students and low-income eligible families at no fee.

Financial Aid - Scholarships - See Chapter 3 -Finance

## Health and Wellness Services

Student Health and Wellness Services is located in Room 2020 in the Student Center. Please refer to the online Schedule Supplement for office hours. Confidential services in the Student Health and Wellness Office are available to students who have paid the semester health fee (handled at registration) and are registered at the time of service in credit-bearing courses for the current semester. Enrollment is verified with each visit. Services offered: first aid, cholesterol screening (nominal fee, call for details), smoking cessation, and brief personal psychological counseling. We also provide resources for reproductive health care. Physician consultations are available for academic program/uncomplicated employment physicals and the initial diagnosis and treatment of short-term illness. PLEASE NOTE: the Student Health and Wellness Office is not a physician's office. Medical (physician) services are contracted and limited. For more information, please visit our website at www.shastacollege.edu/wellness or call (530) 242-7580.

## Library

The Shasta College Library is one of your key resources for course support and lifelong learning. We're a hub of collaborative learning on campus with study spaces and a host of resources on our open shelves. We also maintain a dynamic collection, accessible 24/7, and online reference assistance. Explore this vast spectrum of knowledge, including:

- Millions of magazine and journal articles from thousands of international publications.
- A growing collection of over 100,000 books, audiobooks, DVDs, government documents, and streaming media.
- Nearly 100 computer, video, microform, and other workstations, many with Internet connections.
- Wireless Internet access.
- Group study rooms with media support.
- Self-service printing, photocopying, and faxing.
- Special resources for the physically challenged.
- Service-oriented staff who regard each encounter as an opportunity to share our extraordinary resources.

To learn more about the Library, including current Library hours, please visit us online at www.shastacollege.edu/libraryl.

## Student Employment Services

The Student Employment Center is a resource for Shasta College students seeking work while attending classes, after graduation, and at the completion of their training programs. Bulletin boards are maintained in major campus buildings listing current job opening and internship opportunities both on and off campus. Job listings are also posted on the Student Employment website: www.shastacollege.edu/studentemployment/. Computers, printers, fax, and phone are provided for job search purposes. Resume, cover letter, interviewing, and general job search assistance is available. For more information on student employment services, please stop by Room 126 or call (530) 242-7728.

## Transfer Center

As part of the counseling function, Shasta College operates a Transfer Center. Located adjacent to the counseling offices in the Administration Building, the Center is a resource for students to use in acquiring information on other colleges and universities. The Center houses a library of college and university catalogs, sponsors visits to four-year institutions each semester, and hosts admissions advisors from four year colleges and universities who meet with students here at Shasta College. The Transfer Center also offers workshops to guide students through the UC and CSU transfer application process. Students are invited to make use of the variety of materials and services available. For additional information call (530) 242-7570 or drop by Room 126.

## Special Programs

## Adult Basic Education

Shasta College has a range of adult education courses. There are courses in reading, math, GED-prep, citizenship and English as a Second Language. Many of these courses are free and have open enrollment. Some courses have small group instruction and others are taught using one-on-one mentoring. These courses can be used to prepare for college entry. For more information contact the Learning Center Coordinator, Basic Skills/ESL, at (530) 242-7711.

California Work Opportunity and Responsibility for Kids - CaIWORKs
CalWORKs is a federally mandated program for parents who receive Temporary Assistance to Needy Families (TANF), formerly AFDC. The goal is to assist these parents in gaining employment by providing vocational training and/or remedial education. Supportive services may include academic counseling, child care assistance, and a work-study program that enables CalWORKs students to meet work activity requirements, gain work experience and earn money that will not impact their grant. Shasta College serves Shasta, Tehama and Trinity students. Shasta College CalWORKs Counselors are available for counseling in locations in each of the three counties. Call (530) 225-3949 for additional information or come by the Shasta College CalWORKS office at the Downtown Mall, 1435 Butte Street, Redding. We're located just across the street from the Shasta County Department of Social Services (DSS) CalWORKs office at 1400 California Street.

Special Programs continued on next page...

## Cooperative Agencies Resources for Education - CARE

The CARE Program is designed as a support service for the EOPS student who is at least 18 years of age, a single head of household, a current recipient of TANF/CalWORKs, has a child under 14 years of age, and is enrolled fulltime upon admission into the program. Support services for CARE students may include assistance with childcare or transportation expenses, supplies, textbooks, workshops and referrals. The purpose of the program is to assist the CARE student in pursuing educational goals and in obtaining skills leading to meaningful employment. For additional information, call (530) 242-7540 or visit the EOPS/CARE Office in the Student Center, Room 2005.

## Disabled Students Programs and Services - DSPS

Shasta College offers students with disabilities numerous services including counseling and academic advisement, testing for learning disabilities, readers, note providers, e-texts, audio format texts, in class interpreting for students who are deaf or hearing impaired, designated parking areas, special equipment, assistive technology, test facilitation, etc. These services, accessed by referral from the DSPS Counselor or Learning Disabilities Specialist, are available to students attending either the main Shasta College campus or the extended education locations throughout the District. The DSPS Counselor and Learning Disability Specialist work with students to evaluate their educational needs and to plan and prescribe suitable programs and services. A specially equipped assistive technology computer lab, located in Room 2004, is available for qualifying students with disabilities. Special classes are provided through Adaptive Education curriculum (ADAP). For more information on the various programs and services available through DSPS, please call (530) 242-7790 or stop by our office located in the Student Center, Room 2005.

## Extended Opportunity Program and Services - EOPS

EOPS (Extended Opportunity Program and Services) is state-funded and is established at Shasta College to assist students who are low income and educationally disadvantaged with financial and comprehensive support services. Academic, career and personal counseling are a key component of this program, and students are required to contact an EOPS Counselor three times each semester to plan and monitor their progress. Additional services may include book grants, emergency loans, tutoring, transfer assistance, workshops, cultural events and referrals to both on and off-campus resources. Eligibility for services is determined by Title 5 regulations. Students must complete a BOGG (Board of Governors Grant) and EOPS application. For additional information, call (530) 242-7540 or come to the EOPS/CARE Office in the Student Center, Room 2005.

## GEAR UP and TRiO Programs

GEAR UP
Educational Talent Search (ETS)
Student Support Services (SSS)
Upward Bound (UB)
The Shasta College GEAR UP Partnership serves a two-grade cohort of nearly 2,000 students who are currently entering their junior and senior years at the Anderson and Corning High School Districts. GEAR UP provides services for students, parents and school staff to ensure that students graduate high school prepared for academic and/or vocational postsecondary programs. For more information, please contact the Director of GEAR UP and TRiO Programs at (530) 339-3660.

The TRiO Educational Talent Search (ETS) identifies and assists 7th through 12th grade students from educationally disadvantaged backgrounds who have the potential to succeed in higher education. We also serve high school dropouts by encouraging them to reenter the education system and complete their education. The Shasta College ETS program serves 600 students in Shasta and Trinity counties. For more information, please contact the Project Director at (530) 339-3627.

Student Support Services (SSS) is a federally funded TRiO program for eligible full-time. Full-time students who are preparing to transfer to four-year universities to earn a bachelor's degree. TRiO-SSS provides support services (tutoring, counseling, lending library, calculator loans, orientation, and workshops), cultural and social activities, university tours, and transfer assistance. For additional information on SSS, please visit room 2005 in the Student Center or call (530) 242-7690.

The TRiO Upward Bound Program (UB) provides comprehensive support to eligible low-income, first-generation high school students in their preparation for college entrance. The goal of Upward Bound is to increase the rate at which participants complete secondary education and enroll in and graduate from institutions of postsecondary learning. Upward Bound serves students at Foothill, Enterprise and Central Valley High Schools. For more information, please contact the Project Director at (530) 339-3622.

High School Diploma (Formerly GED)
Residents of the District may work toward a high school diploma by taking college courses. Information is available from the high school from which you plan to receive the diploma. You must request that credit is transferred.

A student who transfers Shasta College course credit to a high school for diploma credit may also use that credit at Shasta College. The completed course will fulfill the subject requirement if it is part of an Associate degree program.

Questions regarding GED testing should be referred to the Shasta Adult School at (530) 245-2626.

Puente
The Puente Project, a national award-winning program for more than 25 years, has improved the college-going rate of tens of thousands of California's educationally underrepresented students. Its mission is to increase the number of educationally disadvantaged students who enroll in four-year colleges and universities, earn college degrees, and return to the community as mentors and leaders to future generations. Puente is interdisciplinary in approach with writing, counseling and mentoring components. The Puente Project is an inter-segmental program that is co-sponsored by the University of California Office of the President and the California Community College Chancellor's Office. Information about the Puente Project is available in Room 126 , by phone at $\% 30$ ) 242-7724 or www.shastacollege.edu/puente.

## Tutorial Services

The Shasta College Writing Center, located in the Learning Resource Center (LRC), is a resource for all writers. Students from all courses are encouraged to make an appointment with a tutor in a one-on-one tutoring session. The Writing Center also provides computers for word processing and research purposes, and offers workshops and resources for writers. The Math and Business Learning Center can also be found in the LRC. Drop in tutoring for students enrolled in math and business classes is available in this center. The Science Learning Lab has tutoring for science classes and is located in the 1600 building.

## Veterans Educational Benefits

The VA Certifying Official in the Financial Aid Office serves as your liaison between the school and the Department of Veterans Affairs to help you apply for and maintain your VA educational benefits. We provide support to help you with your education and information on the latest programs and regulations, extension of delimiting dates, vocational rehabilitation, etc. Be sure to apply for your benefits early, as it takes the Department of Veterans Affairs approximately 120 days to process your application. All new veterans to Shasta College should call for information at (530) 242-7701 or visit the Veterans Certifying Official located in the Financial Aid Office in Room 108. For more information about veterans services please visit our website at http://www.shastacollege.edu/veteransservices/.

The Veterans Counselor will assist you in your educational planning and development of the required Educational Plan. To schedule an appointment with the Veterans Counselor, call the Counseling Center, located in Building 100, at (530) 242-7724.

## Student Life

Art
The Art Department sponsors monthly exhibitions in the College Gallery showing pieces from visiting artists, faculty, and a juried student show in May. The realm of art is a viable medium at Shasta College, and one that fulfills the aspirations and artistic inclinations of each student. For additional information, call (530) 2427730.

Athletics
Shasta College, a member of the Golden Valley Conference, Northern California Football Conference, the Big-8 Conference, and the Bay Valley Conference, offers strong and varied athletic opportunities for men and women. The athletic facilities include a gymnasium, a lap swimming pool and a diving pool, lighted tennis courts, weight training room, a cardio exercise room, well-lighted football stadium, all-weather track and field facility, baseball and softball diamonds, and soccer fields. Shasta College men and women participate in baseball, basketball, cross-country, football, soccer, softball, swimming and diving, tennis, track and field, volleyball and wrestling. Questions regarding athletic eligibility should be directed to the Dean of Physical Education and Athletics at (530) 2427590 or check our website at www.shastacollege.edu/athletics/ .

Student Life continued on next page...

## Student Life (continued):

## Honor Society

Shasta College established the Beta Mu Mu chapter of the Phi Theta Kappa International Honor Society on March 19, 2004. The Phi Theta Kappa's mission is two-fold: 1) recognize and encourage the academic achievement of two-year college students; and (2) provide opportunities for individual growth and development through participation in honors, leadership, service and fellowship programming. Honor society members are invited to join by letter and must have a cumulative GPA of 3.5 and have completed 12 or more units in the Shasta College catalog. Invitations to join are generally mailed out within the first six weeks of each semester, announcing orientation dates where eligible students can gain more information about the society. Membership is granted once the eligibility requirements have been met and the appropriate dues are collected. For more information, contact the Dean of Students Office, Room 2308 on the main campus for brochures and a membership application, or visit the chapter web site at www.shastacollege.edu/ptk/ .

## Housing

Shasta College maintains two dormitories, one for 63 women and one for 63 men. A Commons building providing recreational space and equipment for both indoor and outdoor activities is part of the facility. A "residents only" kitchen equipped with microwaves, two stoves/ovens, a gas BBQ grill, and an ice/water machine is located in the Commons along with a computer lab and TV lounge. Several social and recreational activities are programmed monthly for the enjoyment of the residents.

Students must carry at least 12 units and maintain a 2.0 GPA to remain in the dormitories.

To reserve a space in the Residence Halls - or to be placed on the waiting list - go to the Shasta College homepage, click on Student Services, select Housing (dorms), click on the dormitory web page, and print out the reservation form. Mail the completed reservation form, along with a $\$ 200.00$ refundable security deposit (check or money order), to the address listed on the reservation form. Due to the limited number of spaces available each semester, students are encouraged to reserve a space at least four (4) months prior to the start of the semester. For more information you may call (530) 242 7740.

Off Campus: The College is interested in its students having suitable housing. For students who cannot be accommodated in the dormitories or who prefer to live off-campus, the Housing Office maintains information on rooms and apartments which are offered for rental to college students.

Music
The Music Department offers a wide range of musical opportunities that include workshops, clinics, guest performers, musicals, and concerts. All students are welcome and do not need to be music majors to participate in ensembles. The Concert Choir, Vocal Jazz Ensemble, and instrumental Jazz/Rock Ensemble perform for many activities in the area, as well as performing concerts in the Shasta College Theatre. Evening classes offer opportunities to participate in the Symphony Orchestra, College Chorale, Symphonic Band and Jazz Ensemble. The department is an active and creative force on campus, and offers the general student a stimulating change of pace. For more information, call (530) 242-7730.

## Student Clubs

There is a wide choice of special interest and departmental campus clubs for students to join. New clubs form each year. Detailed information on how to organize a new club or how to join an existing one is available in the Dean of Students Office located in the 2300 Building, or by phoning (530) 242-7626.

Student Activity Cards
When you register at Shasta College, you will be offered the opportunity to buy your Student Activity Card from the Shasta College Student Senate. Funds from the card help Student Senate in financing concerts, Spring Activities Week, and Huck Finn Day. The card allows reduced admission to various Student Senate sponsored activities. An activity card may be purchased each semester. Information will be available during registration or at the Student Senate offices located in the Student Annex, Bldg, 2300, Room 2318. This card is your passport that will help to involve you in college activities.

Student Senate/Student Government
Since virtually all major decisions that are made on the Shasta College campus affect students in some way, student input is welcomed. The organized "student voice" to the campus community is facilitated through the Student Senate. Student views are represented on councils and committees of the college. The Student Body President is a member of the Board of Trustees. Student concerns are channeled through the Student Senate, which meets weekly. Contact the Dean of Students Office for dates and times at (530) 242 7626.

For the most part the Student Senate focuses its attention in three main areas of concern: student needs and concerns, campus activities, and student services.

Shasta College students may participate in the Student Senate. Students are elected and/or appointed to positions in the various levels of the Student Senate. The development of leadership qualities through participation is considered to be of prime importance in student self-government at the College.

## Theatre Arts

The Theatre Arts Department offers a variety of theory, production and technical theatre classes. The department features two main stage productions each academic year. Auditions are held at the beginning of each term and are open to members of the community. Rehearsals are scheduled during the evenings and on weekends. Technical theatre activities occur daily. Community members are encouraged to enroll. For additional information, call (530) 242-7730.

## Chapter 9 - Academic Staff

ABTS, MARVIN L. (1986) Anatomy; B.S., Lewis and Clark College; M.S., Ph.D., Portland State University
ALBRIGHT, JANET (1983) Associate Dean, Library Services; B.A., M.A., University of California, Los Angeles
ANDERSON, CATHERINE E. (1988) Mathematics; B.A., Humboldt State University; M.A., University of Calif. Santa Cruz
ASHBEY, KATHARINE (2012), Early Childhood Education; B.A., Lewis \& Clark College; M.A., Mills College
BAILEY, TERRY (1977) Home Economics; B.S., California State University, Chico; M.S., Oregon State University
BAKER, LENA (2001) English/Writing Center; B.A., Drake University, Des Moines, Iowa; M.A., Texas A\&M, Kingsville, Texas
BANGHART, S. BRAD (1996) Business; A.A., Shasta College; A.A., Santa
Rosa Jr. College; B.A., California State University, Chico; M.S., Capella University, Minneapolis, MN
BEAM, MARC (2011) Director of Research \& Planning, B.A., Chapman University; M.A., Prescott College
BERISSO, CRISTINA (1999) Math; Licendiado en Fisica, Universidad Nacional de Buenos Aires; Ph.D., University of Oxford, United Kingdom
BERKEY, NANCY (2009), Project Director - TRiO-ETS, B.A., Simpson University, M.S., University of La Verne
BERKOW, PETER F. (1990) Journalism/English; B.A., Northeastern Illinois University; M.A., California State University, Chico
BITTNER, ROBERT (1991) Mathematics; A.S., Linn-Benton Community College; B.S., University of Wisconsin-LaCrosse; M.S., University of WisconsinMilwaukee
BLASER, MARK (1996) Chemistry; B.A., Carleton College, Northfield, MN; M.S., University of Colorado, Boulder

BODEEN, TOBY (1998) Counselor; B.A., M.S., University of Wisconsin, Stout
BOGENER, REBECCA (2003) Psychological Counselor; M.A., California State University, Sacramento; B.A., California State University, Chico
BORG, CAROLYN (1990) Counselor; B.A., Biola College; M.S., California State University, Long Beach; Ed.D., Oregon State University, Corvallis
BOSWORTH, JOAN (1976) Family Studies; B.S., M.A., California State University, Chico
BRAZIL, KELLY (2002) Head Coach - Women's Volleyball/Physical Education; B.A., California State University, Humboldt

BROOKSHAW, KEITH (1988) Counselor; A.A., Foothill College; B.A.,
University of Calif. Davis; M.S., Calif. State University, Hayward; Ed. D., University of Southern California
BYRNE, CANDACE (2002) English; B.A., Goucher College, Townson, MD;
M.A., California State University, Humboldt; Ph.D., University of Oregon

CALKINS, PAUL (2004) English; B.A., University of California, Irvine; M.A., University of California, Berkeley
CICERO, JOHN (1990) Business; B.A., University of Rochester; M.B.A., Ph.D., Syracuse University
CINGRANI, DONALD (2005) Accounting; B.S., San Fernando Valley State College
COOPER, WILLIAM D. (1999) Spanish; B.A., University of California, Berkeley; M.A., University of Massachusetts, Amherst

CORT, CHARLES (1995) Dental Hygiene; A.S., B.S., Oregon Institute of Technology; M.A.T., National University
CRENSHAW, KENDALL (1991) Counselor; B.A., Chico; M.A., University of Nevada, Reno
CROES, SCOTT (2007) Biology; B.S., M.S., California State University, Chico; Ph.D., University of Nevada, Reno.
CROOKS, JAMES (2007) English/Basic Skills; B.A., M.A., Humboldt State University
CRUSE, CHERYL (2012) Librarian; B.A., University of Redlands; M.L.S., San Jose State University
CYPHERS BENSON, LAURA (2012) Associate Vice President of Human Resources; B.S., Humboldt University; M.A., Fielding Graduate University; M.A., University of Phoenix
DAVIS, MICHAEL (2002) Athletic Trainer, B.A., California State University, Chico, M.S., University of Arizona, Tucson
DEGNAN, TERESA K., (2000) Nursing; B.S.N., Ball State University, Muncie, Indiana; M.S.N., California State University, Long Beach
DOHERTY, CHARLES (1994) Nursing; B.S., Antioch College; B.S., Calif. State University, Sacramento; M.S., University of Calif., Davis; M.S.N., Calif. State University, Chico
DOYLE, TERESA (2009) Student Success/Student Development, B.A., M.A., California State University, Chico

DUPRE', CINDY M. (1991) Reading/Remediation; A.A., Shasta College; B.A., M.A., CSU, Chico

ECKHARDT, ANTHONY (2006) Economics; B.A., University of New Mexico; M.B.A., National University

EVANS, MATTHEW (2005) Chemistry; B.S., California Polytechnic State University; Ph.D., University of California, Santa Cruz
FARD, DIVAN (2000) Chemistry; B.S., Pahlavi University; Ph.D., University of Pennsylvania
FISKE, RICHARD A. (1988) Music; B.M., B.M. Ed., Oberlin; Conservatory of Music; M.M., Manhattan School of Music; D.Mus., Indiana University, School of Music
FITZHUGH, KELE (2002) Head Coach - Men's Basketball/Physical Education Instructor; B.A., California State University, Chico
FONG, LEO (2001) English; B.A., U.C. Davis; M.A., University of California at Riverside
FOOTE, BARBARA LYNN (1990) Nurse Aide/Home Health Aide; B.S.N., Calif. State University, Chico
FOX, KEVIN (2002) Mathematics; B.A., M.A., California State University, Sacramento
FRIGO, LENORE (2002) Psychology; B.A., Marquette University, Milwaukee; M.A., Ph.D., Louisiana State University

FULTON, SUSANNAH (2009) Biology/Botany, B.S., Brigham Young University, M.S., New Mexico State University, Ph.D., Miami University

GEE, JULIE (2005) Vocational Nursing; B.S., Montana State University
GENTRY, DAVID (2006) Art; B.A., University of Illinois; M.A., California College of Art
GERARD, ROGER (2001) Hospitality Management; B.A., York University; M.A., Northern Arizona University, Arizona
GESSNER, KATHRYN H. (1999) English; B.A., University of Delaware, Newark; M.F.A., University of Arkansas, Fayetteville

GILBERT-AHRENS, ROSIE (2001) Counselor; A.A, Shasta College; B.A., California State University, Chico; M.S., University of La Verne
GLASS, THOMAS (2008) Math, B.S., California State University, Bakersfield, M.S., Boise State University

GOODMAN, DEBORAH (1997) Nurse; B.S.N., California State University, Chico; School Health Credential, MSN California State University, Sacramento GOOGINS, ROBERT P. (1981) Business Education; A.A., College of the Siskiyous; B.S., Sacramento State University; M.S., Southern Oregon GORDON, SCOTT (1999) Office Administration; M.B.A., Brigham Young University
GOTTLIEB, CLIFFORD (1984) Chemistry; B.S. University of Wisconsin; M.S., University of California, Davis
GRANDY, LARRY (1978) Music; A.A., Diablo Valley College; B.A., M.A., California State University, Chico; D.M.A., Arizona State University
HAAS, LORRAINE (2002) Early Childhood Education; B.A., M.A., California State University, Sonoma
HAMAR, DIANA (2000) DSPS Counselor; A.A., Shasta College; B.A. Simpson College; M.A., University of San Francisco
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## Chapter 10 - Glossary of College Terms

AA, Associate in Arts Degree: Liberal arts degree, designed for students who plan to transfer to a four-year college or university..
AS, Associate in Science Degree: Degree awarded for technical and occupational programs, and transfer science programs.

AA-T and AS-T Degrees: Transfer degrees designed for students transferring to the CSU system.

Academic Renewal: A means whereby a student may petition to have previous college work (grades and credits) excluded from current grade point average, if that work is more than two years old and is not reflective of the student's present level of ability or performance.
Academic Year: The regular terms of instruction not including summer session. Fall and Spring Semesters.

Advisory on recommended preparation: A condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program.
Baccalaureate: Refers to the baccalaureate or bachelor's degree usually achieved after four years of undergraduate college study. Shasta College offers the first two years of baccalaureate work in many fields of study.
Certificate of Achievement: Indicates completion of a specific occupational program of study and training.

Class Load: The number of class units a student takes in any given term. A full time class load is twelve or more units. A standard class load is fifteen units.

Clear Standing: Indicates that a student's grade point average in the previous semester and cumulative grade point average are C (2.0) or better.

Continuing Student: A student who was enrolled at Shasta College during the most recent previous semester.

Coop Ed: Cooperative Education - a program of college credit for work experience combined with college study.
Corequisite: A condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course.

Credit: A completed and passed unit of study recorded on the student's official college record.

CSU: California State University System. Of the twenty-three state colleges and universities, the two closest to Shasta College are CSU Chico and CSU Humboldt.

Curriculum: (plural, curricula) Often called "discipline." All the courses of study offered by Shasta College. May also refer to a particular course of study (major) and the courses in that area.

Dismissal: A status caused by low academic or progress performance. The dismissed student may not continue at Shasta College without approval for readmission. See catalog section on Academic Regulations.

District: The area served by Shasta College is the Shasta-Tehama-Trinity Joint Community College District. The District is the governing entity of the College.

Drop/Add: Revision of program of courses when a student wants to drop, change, or add a course.

DSPS: Disabled Students Programs and Services - Program providing both physical and educational accommodations to eligible students with disabilities.

Elective: Any course not required for a major field or General Education requirements.
Enrollment: Official recorded placement of a student in a class.
EOPS: Extended Opportunity Programs and Services - Special support services, financial assistance, and educational programs that assist students who have experienced economic and educational disadvantages.

Full-time Student: A student taking twelve or more class units in a regular semester.
G.P.A.: Grade Point Average. The G.P.A. is compounded based on points for each grade received. Per unit an "A" grade is worth 4 points, a " $B$ " worth 3 , $a$ " $C$ " worth 2 , a "D" worth 1, and an "F" worth 0 . The total number of points accumulated is divided by the number of course units taken for a letter grade. Credit (CR), No Credit (NC), or Incomplete (I) grades are not computed in the grade-point average. Current G.P.A. is for the most recent semester. Cumulative G.P.A. is for all College work to date.
General Education Certification: Transfer courses certified by Shasta College for meeting General Education requirements at the California State Universities.

IGETC: Intersegmental General Education Transfer Curriculum. A pattern of general education courses which is transferable to both the UC and CSU systems.
Independent Study: Independent study provides a forum for advanced work in a given field of study.

Institutional Student Learning Outcomes (ISLOs): Outcomes identified by Shasta College to support student success.
Major: Area or field of concentration for occupational certificate or associate degree.

Matriculation: Matriculation is a process which brings Shasta College into an agreement with a student for the purpose of realizing that student's educational objectives. The process includes Application, Records, Assessment Testing, Counseling, and Orientation.

Nonresident: A person who has not lived continuously in California for one full year prior to enrollment.

Part-time Student: Any student enrolled in less than 12 units of course work in a regular semester.

Pell Grant: A federal financial aid grant available to qualified students who are enrolled in six or more units.

Petition: A request, usually written on a standard form, to adjust a study list or curriculum to fit an individual situation and/or request exception to a policy or regulation.

Prerequisite: A condition for enrollment in a course or a major. Prerequisites for courses usually consist of a previous course or courses in a related subject and/or the instructor's permission. Prerequisites are described in the Catalog course descriptions and indicated in the schedule of classes with an asterisk " "* following the course number.

Probation: An indication that performance is below standard because of academic or progress deficiencies; a trial period in which a student is permitted to redeem failing grades or deficient units.

Registration: The process of providing required information and enrolling in classes each semester.

Resident: A person who has resided in California for one full year prior to enrollment and who meets other residency requirements.

Returning Student: A student who has previously attended Shasta College but did not enroll during the most recent previous term.

Semester: A subdivision of the academic year into two semesters, usually Fall and Spring, each lasting approximately eighteen weeks. To convert semester units to quarter units, multiply by $3 / 2$. To convert quarter units to semester units multiply by $2 / 3$.

Student Educational Plan: A process that helps the student select a specific educational goal, describes the responsibilities of the student in reaching that goal, and states in written form the courses, programs and services required to achieve that goal. Required for financial aid and veteran students.

Student Learning Assessment: Ongoing processes developed by faculty to assess student learning to ensure that students are attaining knowledge and skills.

Student Senate (SCSS): All Shasta College students are members of the Student Senate and are represented by an elected and appointed student government called the Student Senate.

TBA: To Be Announced or Arranged is noted in the Schedule of Classes when the instructor, room, or time of a course was not known at the time of schedule printing. If the class has no specified hours, the student should contact the instructor to arrange the hours.
Transcript: Official copy of a student's academic record (courses and grades).
Unit: Courses are assigned a unit value based on one unit of credit for every hour of lecture or 3 hours of laboratory time per week by the student. A student's progress in the college is determined in part by the number of units completed.

UC: University of California. The nearest UC to Shasta College is UC Davis.
University Center: A partnership between Shasta College and several regional universities to bring four-year Bachelor's degree programs to our District.

Work Study: Usually refers to "College Work Study," a program of federal aid that provides funds for student jobs on campus.

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[^0]:    In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version

[^1]:    (Requirements continued on next page)

[^2]:    In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.

[^3]:    AG 98 SPECIAL TOPICS IN AGRICULTURE - LAB SKILLS - .5-2 Units (formerly AGRI 98)
    Grading: Pass/No Pass Option
    Class Hours: 27-108 lab total
    This course is designed to give students an opportunity to explore a variety of topics in a lab setting dealing with changing knowledge in agriculture. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. **
    **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

[^4]:    AGVETT 3 HEALTH AND DISEASES OF ANIMALS - 4 Units (formerly VETT 3, AGRI 60)
    Prerequisite: A grade of $C$ or higher in AGVETT 2
    Class Hours: 54 lecture/54 lab total
    This course is for students enrolled in their second year of the Veterinary Technology curriculum. The course provides the student with an introduction to infectious and non-infectious diseases and conditions of domestic animals. Material covered includes the etiology, pathogenesis, pathophysiology, and clinical signs of each disease. This course also includes lectures, demonstrations, and laboratory exercises covering routine clinical examinations of blood, urine and feces from several species. Significance of altered value commonly encountered in clinical medicine presented. External and internal parasites, identification, life cycle and clinical importance will be discussed.

[^5]:    CONS 198 SPECIAL TOPICS IN CONSTRUCTION TECHNOLOGY - LAB SKILLS - .5-2 Units
    Grading: Pass/No Pass Option
    Class Hours: 27-108 lab total
    This course is designed to give students an opportunity to explore a variety of topics in a lab setting dealing with changing knowledge in Construction Technology. A different topic will be addressed each time the class is taught. Recommended for Construction Technology and Equipment Operations majors; open to anyone with an interested in these topics. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.**
    **Please check with the Financial Aid Office for federal financial aid limitations regarding repeatability.

