

## 2014-2015 Catalog

11555 Old Oregon Trail<br>P.O. Box 496006<br>Redding, CA 96049-6006<br>(530) 242-7500

Shasta College<br>Tehama Campus<br>770 Diamond Avenue<br>Red Bluff, CA 96080<br>tehama@shastacollege.edu<br>530-529-8980<br>Shasta College<br>Intermountain Campus<br>37581 Mountain View Road<br>Burney, CA 96013<br>intermountain@shastacollege.edu<br>530-335-2311

Shasta College<br>Trinity Campus<br>30 Arbuckle Court<br>Weaverville, CA 96093<br>trinity@shastacollege.edu<br>530-623-2231<br>Shasta College<br>Downtown Redding Campus<br>1400 Market Street<br>Redding, CA 96001<br>530-339-3600

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) 5060234, 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 

Harold J. Lucas<br>Duane K. Miller<br>Rhonda E. Nehr<br>Kendall S. Pierson<br>Rayola B. Pratt<br>Robert M. Steinacher<br>Scott J. Swendiman<br>Student Trustee, Lindsey Matheney

## MISSION STATEMENT

Shasta College provides a diverse student population open access to educational programs and learning opportunities, thereby contributing to the social, cultural, intellectual, and economic development of our communities. The District offers general education, transfer and career-technical programs, and basic skills education. Shasta College provides opportunities for students to develop critical thinking, effective communication, quantitative reasoning, information competency, community and global awareness, self-efficacy, and workplace skills. Comprehensive student services programs support student learning and personal growth. (Revised July 2014)

## TABLE OF CONTENTS

Chapter 1 - The College<br>Chapter 2 - Admission and Enrollment Information<br>Chapter 3 - Finance<br>Chapter 4 - Grading and Academic Standards<br>Chapter 5 - Degrees and Certificates<br>Chapter 6 - Course Descriptions<br>Chapter 7 - Student Rights and Responsibilities<br>Chapter 8 - Services for Students, Special Programs and Student Life<br>Chapter 9 - Academic Staff and Emeritus<br>Chapter 10 - Glossary of College Terms<br>Index

## 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 financia 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

## 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.

Dr. 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.

Dr. 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 

The College Catalog is produced annually by the Office of Academic Affairs

## Administrative Staff

Superintendent/President Dr. Joe WyseAssistant to the Superintendent/President............................................................................ Theresa Markword
Vice President of Administrative Services Morris RodrigueNancy Funk
Director, Campus Safety Craig Carmena
Director, Food ServicesDenise Axtell
Director, Physical Plant Services George Estrada
Supervisor, Custodial Services ..... Gregory Wacker
Supervisor, Transportation Department Pamela Carney
Hazardous Materials Compliance Supervisor Dave Freeman
Vice President of Instruction Meridith Randall
Associate Dean, Physical Education and Athletics Mike Mari
Dean, Arts, Communications, Consumer and Social Sciences Ralph Perrin
Director, Early Childhood Education Kathleen Tibbals
Dean, Business, Agriculture, Industry, Technology and Safety/EWD Eva JimenezAssociate Dean, CTE.Dan Haskins
Director, Fire Technology and EMS Programs ..... Tony Osa
Associate Dean, Extended Education ..... Vacant
Dean, Health Sciences Kathy Royce
Dean, Library Services and Educational Technology William BreitbachDean, Science, Language Arts and Math.Frank NigroAssociate Dean, Foundational Skills and Adult Education........................... Vacant
Director of Research and Planning Marc Beam
Vice President of Student Services. Kevin O'Rorke
Dean, Enrollment Services Timothy Johnston
Director, Admissions and Records ..... Sheree Whaley
Director, Financial Aid Connie Barton
Director, DSPS/EOPS ..... Sandra Hamilton-Slane
Director, Student Housing Stevan Cross (Interim)
Program Director, Foster and Kinship Care Sheri Wiggins
Program Director, Gateway to College Nancy Berkey
Program Director, TRiO - Educational Talent Search ..... Kehinde Adesina
Program Director, TRiO - Upward Bound/SSS Sylvia Ruano
Program Coordinator - CalWORKs ..... Nadia Salsedo Elwood
Associate Vice President of Human Resources Laura Cyphers Benson
Associate Vice President of Information Services and Technology Vacant
Information Services Technology Supervisor James Crandall
Technology Programmer/Analyst Nicole Chelonis
Technology Support Supervisor John Lutkemeier
Director of Grant Development Amy Schutter
Executive Director, Shasta College Foundation Scott Thompson
College Calendar

## FALL SEMESTER 2014



## SPRING SEMESTER 2015

| Jan. 19........... Martin Luther King, Jr. Holiday |  |
| :---: | :---: |
| Jan. 20 ............. All College Day for Faculty |  |
| Jan. 21 | INSTRUCTION BEGINS - DAY AND EVENING, ON AND OFF-CAMPUS |
| Feb. 13 | Lincoln's Day Holiday |
| Feb. 16 | Washington's Day Holiday |
| April 6-1 | Spring Break |
| April 13 | Classes Resume |
| May 22 | Last Day of Spring Semester |
| May 22 | .. Commencement |

## 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 337acre 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, cultural 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 2014 marks the $64^{\text {rd }}$ 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 on-line at: shastacollegeparking 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 ocation 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 is an integral part of the California Community Colleges and its' Doing What Matters for Jobs and the Economy framework, investing funding and resources in industry sectors that are key to California's economic growth. EWD's industry-specific workforce services are coordinated through a system of sector specialists that align community college and other workforce development resources with the needs of industry sectors and occupational clusters through a regional focus. The goal is to invest in the skills of California's workforce - now and in the future through partnerships with business and industry that result in highly specialized industry training, technical consulting and business development. The end result is to meet industry's need for skilled workers. Shasta College is host to three Industry specific Deputy Sector Navigator grants in Advanced Manufacturing, Small Business and Agriculture Water and Environmental Technologies.

For additional information visit our website at www.ShastaDSN.com. You can also visit us on the Shasta College campus in the 2200 building.

## 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: shastacollegesecurityreport.

## 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 }9608
530-529-8980; tehama@shastacollege.edu
Shasta College Intermountain Campus
37581 Mountain View Road, Burney, CA }9601
530-335-2311; intermountain@shastacollege.edu
Shasta College Trinity Campus
30 Arbuckle Court, Weaverville, CA }9609
530-623-2231; trinity@shastacollege.edu
```

Services available at each campus include admissions assistance, onsite 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 offcampus, extra-curricular field trips/excursions. If you choose to participate, be advised that 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
Nancy de Halas, Administrative Assistant
Shasta College Foundation
P.O. Box 496006, Redding, CA 96049-6006
(530) 242-7512
shastacollegefoundation

## 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: shastacollegecampussafety.

## 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 241-2877 for all of your route and schedule questions and to purchase tickets and passes.

## TRAX (Tehama Rural Area Express) <br> 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://trinitytransit.org

Trinity Transit is the public transit operator for Trinity County. It operates two fixed-route services in the County: the Weaverville Shuttle and the Hayfork-Weaverville 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

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 national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, or military and veteran status, 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 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 discrimination. It is both illegal and prohibited by this policy to retaliate against any individual for filing a complaint or participating in an investigation pertaining to these matters.

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.

No District funds shall ever be used for membership, or for any participation involving financial payment or contribution on behalf of the District or any individual employed by or associated with it, to any private organization whose membership practices are discriminatory on the basis of national origin, religion, age, gender, gender identity, gender expression, race, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics, or because of his or her association with a person or group with one or more of these actual or perceived characteristics.

## Prohibition of Harassment (including sexual harassment)

## Reference: Board Policy 3430

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 is committed to providing an educational, employment and business environment that respects the dignity of individuals and groups. The District shall be free of 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, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation of any person, or military and veteran status, 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 of 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 action, 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 of employment.

## Contact Information

The Associate Vice President of Human Resources has the 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 at:
http://www.shastacollege.edu/Human\ Resources/FacultyStaff\%2 ODiversity/Pages/5507.aspx. The Human Resources Office is located in the Administration Building, Room 121. Students with complaints of discrimination related issues may contact Laura Cyphers Benson, Associate Vice President of Human Resources at (530) 242-7648. For further information regarding Section 504 of the Rehabilitation Act, contact Sandra Hamilton-Slane, Section 504 Coordinator, Shasta College, 11555 Old Oregon Trail, P.O. Box 496006, Redding, CA 96049-6006, (530) 242-7790.

## 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) 242-7648.

Estudiantes que desean presentar una queja, deberian de ponerse en contacto con en la Oficina de Recursós Humanos (530) 2427640, 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 may be admitted to Shasta College classes.

## Service Area Outcomes

1. At least $85 \%$ of all students, staff and faculty will be satisfied with operations in the Admissions and Records Department.
2. Admissions and Records staff will continue to hold workshops twice a semester to teach students to fully utilize their MyShasta account.

## 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:

1. 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
2. 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 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

## STUDENT SUCCESS AND SUPPORT PROGRAM

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."

Matriculation is defined by the Seymour-Campbell Student Success Act of 2012 as "a process that brings a college and a student into an agreement for the purpose of achieving the student's educational goals and completing the student's course of study." The agreement involves the responsibilities of both the college and student. The Student Success and Support Program includes services to optimize student opportunities to achieve academic success.

The College agrees to provide:

- An admissions application process.
- An orientation to the College's programs and services.
- Assessment in English, math and reading before course registration.
- Counseling and advisement to develop an educational plan.
- Follow-up evaluation of each student's progress in achieving an education goal.

The student agrees to:

- Identify an academic and career goal upon application.
- Complete new student orientation, if new to the college.
- Declare a specific course of study after a specified time period of unit accumulation, as defined by the Board of Governors.
- Attend class and work diligently to complete class assignments.
- Complete courses and maintain academic progress toward an educational goal and course of study identified in the Student Educational Plan (IEP).

FIRST-TIME STUDENTS are required to take advantage of Student Success and Support 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 prepare for college. The orientation includes information about Shasta College policies and procedures, tips for college success, and instruction in using MyShasta Shasta College's online records and registration system. Beginning in the 2014-15 academic year, students may also choose to complete this requirement by completing the orientation online. Counselors at in-person orientations provide assistance to students in selecting their classes for the following semester. Please contact the Assessment Center at (530) 242-7751 to sign up or receive additional information on orientation times and locations.
5. Education Plan: All new students must identify an academic and career goal upon application and complete a preliminary education plan to enjoy priority registration. Returning students and students who began taking classes at Shasta College after summer 2014 must also have a comprehensive education plan on file by the end of their $3^{\text {rd }}$ semester to retain priority registration.
6. Registration: Students who participate in services 1 through 5 will be given "priority registration" status.
Students wishing to appeal any component of the Student Success and Support Program process should contact the Director of Admissions and Records at (530) 242-7659.

## ASSESSMENT CENTER

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.

The Assessment Center in Room 101/102 in the 100 Building is open Monday through Friday. Testing in the Assessment Center is by appointment only. Please visit the Assessment Center web page and click on the Assessment Appointment link to make an appointment. Assessments will be completed on computers. Please plan for approximately $11 / 2$ hours to complete all three sections of the assessment. 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.

Orientations, assessment and counseling are also available for students in Tehama, Trinity, and Eastern Shasta County, as well as for students taking classes online from distances outside of Northern California. For more information, contact the Tehama campus at (530) 529-8980.

## Service Area Outcome

1. The Assessment Center staff will collaborate closely with counselors to insure accurate placement levels for incoming students.
2. At least $90 \%$ of all students will be satisfied with operations in the Assessment Center.

## Student Support Learning Outcomes

1. At least $35 \%$ of students will prepare for the assessment test.

## COUNSELING

Throughout the semester, counselors are available to assist students in planning and achieving their educational and career goals. Services are available by appointment; brief walk-in appointments are available most days. Call the Counseling Center at (530) 242-7724 or go to counselingappointments.

## Service Area Outcome

1. Students express a high degree of satisfaction with counseling services.

## Student Support Learning Outcomes

1. As a result of their counseling session, students will have an improved understanding of academic requirements and/or the classes they need to take in order to achieve their academic goals.
2. As a result of their counseling session, students will be able to identify actions they can take to clarify their career and/or educational goals.
3. As a result of their counseling session, students will be able to articulate personal issues affecting their success and create a plan for addressing these issues.

## PETITION PROCESS

Students may appeal the loss of priority enrollment status due to extenuating circumstances or if they have a disability and applied for, but did not receive a reasonable accommodation in a timely manner. Extenuating circumstances are verified cases of accidents, illnesses or other circumstances beyond the control of the student. Shasta College may exempt from the 100 unit limit category those students enrolled in high unit majors or programs.

Shasta College may also allow students who have demonstrated significant academic improvement to appeal the loss of priority enrollment status. Significant academic improvement is defined as
achieving a minimum grade point average of 2.0 and completing more than $50 \%$ of units attempted in the student's most recently completed semester. Students have the right to refuse matriculation services. Please contact the Admissions and Records office for forms and additional information.

If a student believes the District has failed to make good faith efforts to develop an education plan, has failed to provide programs and services specified in the student educational plan, or has otherwise violated the requirements of the Student Success Act, the student may file a complaint pursuant to Title 5, Section 55534(a). If a challenge contains an allegation that the District has violated the provisions of Section 55521(1)(6) 55522(c), the District shall, upon completion of challenge procedures, advise the student that he or she may file a formal complaint of unlawful discrimination pursuant to subchapter 5 (commencing with Section 59300) of Chapter 10.

## 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 120 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 2 A 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, and see our website at 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. The exception to this is that "Special Admit" (Concurrent) students are required to meet the Advisory.
Where can I find 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-firstserved, 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 oneway 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 vice-versa. 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.

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.


## 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.

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 Including Transcripts

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 960496006.

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 | $50 \%$ |
| During fourth week class instruction | $25 \%$ |
| 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 Concurrent Enrollment 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 California 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.

YesNoI 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 | Drom-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) |
| Pignature Number (Optional) |  |

# California Nonresident Tuition Exemption <br> For Eligible Califormia 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 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 2014-15, if you fall within these income levels:

| Number in Household <br> (including yourself) | 2013 Total Family Income <br> (Adjusted Gross Income <br> and/or Untaxed Income) |
| :---: | :---: |
| 1 | $\$ 17,235$ or less |
| 2 | $\$ 23,265$ or less |
| 3 | $\$ 29,295$ or less |
| 4 | $\$ 35,325$ or less |
| + | Add $\$ 6,030$ for each |
|  | additional 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 by filing the Free Application for Federal Student Aid (FAFSA).

Students may apply for the BOGFW online at BOGFeeWaiverApplication. You may complete an online application or download a printable PDF application. Only complete one. Applications for 2014-15 are good for Summer 2014, Fall 2014, and Spring 2015.

DEADLINES: To file for a BOGFW 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. 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 <br> (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 are 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.

## Service Area Outcome:

1. At least $80 \%$ of all students surveyed will be satisfied with operations in the Financial Aid Department.

## Student Support Learning Outcomes:

1. Students utilizing the walk-in service will be able to express satisfaction in obtaining the requested information and for the services received.
2. Students will be able to adhere to deadlines and accurately complete all necessary forms for financial aid using technology. This learning outcome will be demonstrated through the federal work study program. This learning outcome will be applied to the overall financial aid process.
3. Students will be able to adhere to deadlines and accurately complete all necessary forms for financial aid using technology. This learning outcome will be demonstrated to all students utilizing the overall financial aid process.

## HIGH SCHOOL DIPLOMA

Students must have a high school diploma, GED or pass a state authorized test such as the California High School Proficiency Exam as a basic eligibility for federal financial aid.

## FINANCIAL AID WEBPAGE AND SHASTA - MY DOCUMENTS

 FOR COMMUNICATIONThe Financial Aid webpage at shastacollege.edu/fa provides information about the financial aid process. Access this page for answers to your questions. For information regarding specific documents needed or information related to their financial aid processing, students should refer to their MyShasta account. Students will be notified via email as to their status during the financial aid evaluation process. Students without email SHOULD periodically check their MyShasta account. Specific questions relating to financial aid must be handled in person with a valid id.

## BOOKS

See our web page for the many resources regarding assistance with books.

## SCHOLARSHIPS

The Financial Aid Office administers a scholarship program that awards more than $\$ 180,000$ 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 3 Priority filing date for financial aid. After this date funds are awarded on a first-come, first- served basis.
August Fall electronic scholarship application period opens.
October Fall electronic scholarship application period closes.
December Spring electronic scholarship application period opens.
February Spring electronic scholarship application period closes.
PLEASE NOTE: Book Loan/Grant information can be found at www.shastacollege.edu/fa books for students who qualify.

My Documents for Communication: Current students can use the Financial Aid menu through MyShasta 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.

For more information on appealing a grade, call (530) 242-7659.

## 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 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 Admissions Office). This record shall 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.

| AP Subject Exam | CSU GE AREA | IGETC AREA |
| :--- | :--- | :--- |
| Art History | C1 or C2 | 3A or 3B |
| Biology | B2 and B3 | 5B 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 | 1A or 3B |
| Environmental Science | B2 + B3 | 5A with lab |
| Environmental Science (post-Fall 2009) | B1+ B3 | 5A with lab |
| European History | C2 or D6 | 3B or 4F |
| French Language | C2* | 3B and 6A |
| French Literature | C2 | 3B and 6A |
| German Language | C2* | 3B and 6A |
| Government \& Politics: Comparative | D8 | 4H |
| 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 | 3B and 6A |
| Latin Literature | C2* | 3B and 6A |
| Latin: Virgil | C2 | 3B and 6A |
| Macroeconomics | D2 | 4B |
| Microeconomics | D2 | 4B |
| Music Theory | C1* | NA |
| Physics B | B1 + B3* | 5A with lab |
| Physics C (Electricity/Magnetism) | B1 + B3 | 5A with lab |
| Physics C (Mechanics) | B1 + B3 | $5 A$ with lab |
| Psychology | D9 | 4I |
| Spanish Language | C2* | 3B and 6A |
| Spanish Literature | C2* | 3B and 6A |


| Statistics | B4 | 2A |
| :--- | :--- | :--- |
| United States History | (C2 or D6)+US-1 3B or 4F |  |
| World History | C2 or D6 | $3 B$ or 4F |

*Check 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 4235Upon 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

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.

| 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, internetbased (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 highspeed 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 Internetbased 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 MyShasta 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 oncampus events (consult the MyShasta 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.

## 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:
.5 unit $=27$ hours; 1.0 unit $=54$ hours; 1.5 units $=81$ hours;
2.0 units $=108$ hours; 2.5 units $=135$ hours; and 3.0 units $=162$ hours.
*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 | B 2 | 5 B (without lab) |
| Chemistry HL | B 1 | 5 A (without lab) |
| Economics HL | D 2 | 4 B |
| Geography HL | D 5 | 4 E |
| History (any region) HL | C 2 or D6 | 3 B or 4F |
| Language A1 (any language |  |  |
| $\quad \mathrm{C} 2$ | 3 B and 6A |  |
| Language A2 (any language |  |  |
| $\quad$ except English) HL | C 2 | 3 B and 6A |
| Language A1 (any language) HL | C 2 | 3 B |
| Language A2 (any language) HL | C 2 | 3 B |
| Language B (any language) HL | $\mathrm{N} / \mathrm{A}$ | 6 A |
| Mathematics HL | B 4 | 2 A |
| Physics HL | B 1 | 5 A |
| Psychology HL | D 9 | 4 l |
| Theatre HL | C 1 | 3 A |

## 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 Admissions and Records Office with a copy of his/her DD214 for verification. Application for such credit must be made on a form obtained from the Admissions and Records Office. This credit must be verified. All new Veterans to Shasta College should call for information and an appointment at (530) 242-7701.

## 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 $A, B, C, D, F$, 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 $\mathrm{A}, \mathrm{B}, \mathrm{C}$ 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.
(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 no less than 36 months, 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\%).
c. For record purposes - Any changes made in the student's class schedule as a result of a counselor recommendation shall be treated as occurring within the first four weeks of the semester or $30 \%$ of the term for classes less than a semester in length.

## NOTIFICATION OF PROBATION

Students shall be notified by the Admissions and Records Office that they are on probation no later than 20 working days after the start of the next successive semester. The notification will include an explanation of the conditions that the student must satisfy as a result of their probation.

## 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", "l", and "NP" 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 disenroll 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

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 2014-15 <br> 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 four-year college or university.

Associate Degrees for Transfer (ADT)
Associate of Arts - University Studies
Associate of Arts (Music)
Associate of Science (Ag - Ag Business, Ag - Environmental Horticulture, and Ag - Sustainable Ag)

## Associate Degrees for Transfer (ADT):

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:

| Administration of Justice | Kinesiology | Sociology |
| :--- | :--- | :--- |
| Business Administration | Music | Studio Arts |
| Communication Studies | Philosophy | Theatre Arts |
| Early Childhood Education | Physics |  |
| English | Psychology |  |

## 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.

Associate Degrees for Transfer start on next page....

## Administration of Justice

## Associate in Science for Transfer:

## SC Program: AS-T. 1003

PROGRAM DESCRIPTION: This course of study prepares students for transfer to complete work for a bachelor's degree in criminal justice or economic crime investigation. Students will be able to describe the individual functions and components of the modern criminal justice system; use introductory concepts of legal research to locate, analyze, and discuss the content of statutory and case law; and explain the underlying cause of antisocial and criminal behavior. Proper selection of curriculum electives further enables students to study other academic disciplines, such as political science, sociology, and public administration. This program is appropriate for students considering law school as well as certain careers in law enforcement.

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 and apply communication skills when interacting with all people.
2. Identify the need for understanding diverse populations in the criminal justice field and establish strategies for effectively communicating with those diverse populations.
3. Identify the cultural differences found in most communities and apply methods of effectively bridging those differences.
4. Demonstrate and apply critical thinking skills in dealing with ethical decision making within the criminal justice system.
5. Demonstrate the ability to locate resources which enable the resolution of problems within the community and the participants of the criminal justice system.
6. Recognize the major impact ethics and morality has on the citizens the law enforcement profession serves and the daily interaction with others within the criminal justice system.
7. Develop effective writing skills to properly document law enforcement priorities.
8. Demonstrate an understanding of the theory and application of law enforcement rules, regulations, and applicable laws.
9. Demonstrate the ability to make the correct decision during critical life-threatening situations.

## REQUIREMENTS:

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Administration of Justice for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course. A "P" (Pass) grade is not an acceptable grade for courses in this major.

REQUIRED CORE:
ADJU 10* Introduction to Administration of Justice 3
ADJU 15 Concepts of Criminal Law 3
LIST A (Choose two courses from the following):
ADJU $16 \quad$ Legal Aspects of Evidence (3)
ADJU $17 \quad$ Principles/ Procedures of the Justice System (3)
ADJU 18 Community Relations (3)
ADJU $20 \quad$ Principles of Investigation (3)
ADJU 22 Juvenile Procedures (3)
ADJU 40 Introduction to Corrections (3)
LIST B (Choose two courses from the following):
ADJU $45 \quad$ Criminal Street Gangs (3)
ADJU $46 \quad$ Narcotic and Drug Abuse (3)
MATH 14*\# Introduction to Statistics (4)
PSYC 1A*\# General Psychology (3)
SOC 1*\# Introduction to Sociology (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 SCIENCE IN ADMINISTRATION OF JUSTICE FOR TRANSFER DEGREE REQUIREMENTS: <br> $\begin{array}{lr}\text { Major } & 18-19 \\ \text { General Education } & 37-39^{*}\end{array}$ <br> General Electives <br> 10-12*

Degree Total Will Not Exceed 60 Units
‘Number will vary depending on units that double count.

## Business Administration

## Associate in Science for Transfer:

SC Program: AS-T. 1001
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.

Continued on next page ...

## Business Administration AS-T Degree (continued):

REQUIREMENTS:
In addition to the 37-39 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. A "P" (Pass) grade is not an acceptable grade for courses in this major.

REQUIRED CORE:

| ACCT 2 | Introduction to Financial Accounting | 4 |
| :--- | :--- | ---: |
| ACCT 4 | Introduction to Managerial Accounting | 4 |
| BUAD 6 | Business Law I | 3 |
| ECON 1A*\# | Principles of Economics (Micro) | 3 |
| ECON 1B*\# | Principles of Economics (Macro) | 3 |
|  |  | $3-4$ |
| LIST A: (Choose one course from the following) |  |  |
| MATH 8*\# | Finite Mathematics (3) |  |
| MATH 9*\# | Survey of Calculus (4) |  |
| MATH 14*\# | Introduction to Statistics (4) |  |

LIST B: (Choose two course from the following) 6-8
Any List A course not used above

| BUAD 10 | Introduction to Business (3) OR |
| :--- | :--- |
| BUAD 66 | Business Communications (3) |
| CIS 1 | 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 SCIENCE IN BUSINESS ADMINISTRATION FOR

 TRANSFER DEGREE REQUIREMENTS:Major
General Education

26-28
General Education
37-39*
General Electives
2-6*
Degree Total Will Not Exceed 60 Units
*Number will vary depending on units that double count.

## Communication Studies

## Associate in Arts for Transfer:

## SC Program: AA-T. 1001

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 personal 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 win-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.

## REQUIREMENTS:

In addition to the 37-39 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. A "P" (Pass) grade is not an acceptable grade for courses in this major.

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 | $37-39^{*}$ |
| General Electives | $8-18^{\star}$ |
| Degree Total will Not Exceed 60 Units |  |
| 'Number will vary depending on units that double count. |  |

## Early Childhood Education

## Associate in Science for Transfer:

## SC Program: AS-T. 1002

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.

Continued on next page...

## Early Childhood Education AS-T Degree (continued):

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.

## REQUIREMENTS:

In addition to the 37-39 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. A "P" (Pass) grade is not an acceptable grade for courses in this major.

REQUIRED CORE:
ECE 2* Child, Family, Community
$\begin{array}{lll}\text { ECE } 8 & \text { Teaching Practicum for Young Children } & 5\end{array}$
ECE 9*\# Child, Growth and Development 3
ECE 15 Child, Health, Safety and Nutrition 3
ECE 17 Principles/Practices of Teaching Young Children 3
ECE 20
ECE 28
Introduction to Curriculum
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 SCIENCE IN EARLY CHILDHOOD EDUCATION FOR TRANSFER DEGREE REQUIREMENTS:

$\begin{array}{lr}\text { Major } & \text { 26 } \\ \text { General Education } & 37-39^{*}\end{array}$
General Electives
Degree Total Will Not Exceed 60 Units
‘Number will vary depending on units that double count.

## English

## Associate in Arts for Transfer:

## SC Program: AA-T. 1007

PROGRAM DESCRIPTION: The Associate in Arts in English for Transfer degree introduces students to English or English Education study and preparation, including the appreciation and understanding of literary works through intellectual and cultural movements, such as Utilitarianism or the Aesthetic Movement, and historical and social changes. The Associate in Arts in English for Transfer degree is designed to provide students with a common core of lower division courses required to transfer and pursue a baccalaureate (4-year) degree in English in the CSU system.

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. Define basic critical reasoning concepts; identify literary genres; and write effective clear and well-organized analytical arguments or literary analyses.
2. Identify and discuss plot, conflict, setting, time frame, characters (protagonist and antagonist), dialogue, suspense, rising action, and denouement with works of literature in papers and on examinations.
3. Identify and write about or discuss diction, syntax, figurative language, sound and rhythm, irony, and various poetic forms.
4. Analyze and write about literature with an understanding of the historical and cultural contexts from which literary classics spring.
5. Apply a variety of approaches to the analysis of literary works, including but not limited to historical, thematic, and formal approaches.

## REQUIREMENTS:

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in English for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a $C$ or better in each major course. A "P" (Pass) grade is not an acceptable grade for courses in this major.

## REQUIRED CORE:

ENGL 1B*\# Literature and Composition 3
ENGL 1C*\# Critical Reasoning, Reading and Writing 3
LIST A (Choose two courses from the following):
ENGL 10A*\# World Literature to 1650 (3)
ENGL 10B*\# World Literature after 1650 (3)
ENGL 11A*\# Survey of American Lit., Pre-Colonial to 1860 (3)
ENGL 11B*\# Survey of American Literature, 1860-present (3)
ENGL 13A*\# Survey of English Literature (3)
ENGL 13B*\# Survey of English Literature (3)
LIST B (Choose one course from the following):
Any List A course not used above
ENGL 14*\# A Survey of Drama as Literature (3)
ENGL 15*\# Literature By and About Women (3)
ENGL 16*\# Poetry (3)
ENGL 17*\# Introduction to Shakespeare (3)
ENGL 18*\# African American Literature (3)
ENGL 19*\# A Survey of the Bible as Literature (3)
ENGL 20*\# World Mythology (3)
ENGL 24*\# Multicultural Perspectives in American Literature (3)
ENGL 25*\# Linguistics (3)
ENGL 31*\# Creative Writing (3)
ENGL 33*\# Film and Fiction (3)
ENGL 36*\# Children's Literature (3)
Continued on next page...

## English AA-T Degree (continued):

LIST C (Choose one course from the following):
Any List A or B course not used above
ASL 1* American Sign Language 1 (4)
ASL 2-4*\# American Sign Language, 2-4 (4)
CHIN 1* Mandarin Chinese (5)
FREN 1* Elementary French (5)
FREN 2-4*\# Elementary/Intermediate French (3-5)
GERM 1* Elementary German (5)
GERM 2*\# Elementary German (5)
JAPN 1* Elementary Japanese (5)
JAPN 2-4*\# Elementary/Intermediate Japanese (5)
SPAN 1* Elementary Spanish (5)
SPAN 2-4*\# Elementary/Intermediate Spanish (3-5)
CMST 30* Oral Interpretation (3)
THTR 1*\# Introduction to Theatre (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 ARTS IN ENGLISH FOR |  |
| :---: | :---: |
| Major | 18-20 |
| General Education | 37-39* |
| General Electives | 10-17* |
| Degree Total Will Not Exceed 60 Units |  |

## Kinesiology

## Associate in Arts for Transfer:

## SC Program: AA-T. 1003

PROGRAM DESCRIPTION: The Associates in Arts in Kinesiology for Transfer provides students with the opportunity to meet the requirements for transfer to the California State University system in the Kinesiology major. The degree is designed to prepare students for a variety of career options in the field of Kinesiology such as teaching, exercise science, sports medicine, and physical therapy. Current and prospective community college students are encouraged to meet with a counselor to develop an educational plan that best meets their goals and needs.

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 and apply the concepts, theoretical principles, and historical and current trends in the field of Kinesiology.
2. Understand how exercise in the form of physical activity contributes to the physiological responses and adaptations of the human body.
3. Apply critical thinking, writing, reading, oral communication, and quantitative and qualitative analysis to skill and movement-related concepts.
4. Identify and apply the scientific principles of movement, exercise, and sport including the knowledge and skill in the listed activity course families of fitness, aquatics, individual sport and team sport.
5. Transfer to the California State University level programs with a comprehensive foundation in Kinesiology courses.

## REQUIREMENTS:

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Kinesiology for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a $C$ or better in each major course. A "P" (Pass) grade is not an acceptable grade for courses in this major.

REQUIRED CORE:
ANAT 1*\# Human Anatomy with Lab 5
KINES 1 Foundations of Kinesiology 3
PHY 1*\# Physiology with Lab 5
Movement Based Courses: (minimum of 3) 3
Select a maximum of one course from any three of the following areas for a minimum of three units.

| Aquatics: |  |
| :--- | :--- |
| PE 30A | Beginning Swimming (1) OR |
| PE 30B | Intermediate Swimming (1) OR |
| PE 31 | Aqua Aerobics (1) OR |
| PE 32 | Water Polo (1) OR |
| PE 37 | Springboard Diving (1) |



| Fitness and Conditioning: |  |
| :--- | :--- |
| PE 11 | Fundamental Conditioning (1) OR |
| PE 12A | Beg. Weight Training and Fitness (1) OR |
| PE 12B | Inter. Weight Training and Fitness (1) OR |
| PE 15 | Aerobic Dance (1) OR |
| PE 16 | Aerobic Exercise (1) OR |
| PE 17 | Yoga (1) |


| Individual Sports: |  |
| :--- | :--- |
| PE 51A | Beginning Tennis (1) OR |
| PE 51B | Intermediate Tennis (1) OR |
| PE 62 | Golf (1) OR |


| Team Sports: |  |
| :--- | :--- |
| PE 69 | Football (1) OR |
| PE 70A | Beginning Volleyball (1) OR |
| PE 70B | Intermediate Volleyball (1) OR |
| PE 71 | Softball (1) OR |
| PE 72 | Baseball (1) OR |
| PE 74 | Soccer (1) OR |
| PE 75 | Basketball (1) |

LIST A (Choose two courses from the following):
CHEM 1A*\# General Chemistry (5) OR
CHEM 2A*\# Introduction to Chemistry (5)
KINES 2 Sports Emergency Care (3)
MATH 14*\# Introduction to Statistics (4)
PHYS 2A*\# General Physics (4)
*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 KINESIOLOGY FOR <br> TRANSFER DEGREE REQUIREMENTS:

| Major | $23-25$ |
| :--- | ---: |
| General Education | $37-39^{*}$ |
| General |  |

General Electives
2-9*
Degree Total Will Not Exceed 60 Units
*Number will vary depending on units that double count.

## Music

## Associate in Arts for Transfer:

## SC Program: AA-T. 1008

PROGRAM DESCRIPTION: The Associate in Arts in Music for Transfer Degree is designed to prepare the student for transfer to fouryear institutions of higher education and specifically intended to satisfy the lower division requirements for the Baccalaureate in Arts in Music at the California State University. This degree is designed to prepare students to demonstrate competence and discipline in the study of music theory, music analysis, music composition, and musicianship skills, and to demonstrate proficiency in ensemble skills and solo performance skills. Completion of this curriculum will demonstrate commitment to the serious study of Music in practice and in theory and provide comprehensive preparation for upper-division 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. List and describe the major concepts, vocabulary, theoretical perspectives, and creative performance practices of music.
2. Demonstrate ensemble specific performance practices and professional standards of conduct expected of ensemble participants.
3. Perform solo literature with an accompanist (if appropriate) using stylistically accurate rhythm, pitch, diction (or articulation) and musical expression.
4. Demonstrate the ability to "audiate" a musical score by sight reading and performing complex rhythms and by sight-singing chromatic, modulating, and post-tonal melodies.
5. Demonstrate the ability to recognize patterns and musical function by aurally identifying and transcribing scales, modes, post-tonal melodies, and complex harmonic progressions. Analyze chromatic harmonic progressions that include modulation using 20th century techniques.

## REQUIREMENTS:

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Music for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a $C$ or better in each major course. A "P" (Pass) grade is not an acceptable grade for courses in this major.
REQUIRED CORE:
MUS 2 Diatonic Harmony and Musicianship 4
MUS 3 Advanced Diatonic Harmony and Musicianship 4
MUS 4 Chromatic Harmony
MUS 5 20th Century Harmony
MUS $48 \quad$ Applied Music (four semesters, 5 units each) 2
Large Ensemble (4 semesters, 1 unit each from the following): 4
MUS 31 Chamber Choir (1)
MUS 33 Jazz Ensemble (1)
MUS $35 \quad$ Vocal Jazz Ensemble (1)
MUS 40 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 $46 \quad$ Shasta College Symphonic Band (1)
MUS $47 \quad$ Shasta College Jazz Ensemble (1)

| ASSOCIATE IN ARTS IN MUSIC FOR |  |  |
| :--- | :--- | ---: |
| TRANSFER DEGREE REQUIREMENTS: |  |  |
| Major |  |  |
| General Education | 22 |  |
| General Electives | $37-39$ |  |
|  |  | $0-1$ |

## Philosophy

## Associate in Arts for Transfer:

Pending Chancellor's Office Approval Approved 6/26/2014
SC Program: AA-T. 1009
PROGRAM DESCRIPTION: This program introduces students to Philosophy. Philosophy is the study or logical analysis of the principles underlying conduct, reasoning, value, knowledge and the nature of the universe. Students will engage in the critical analysis of a number of theories defended by philosophers, who have attempted to answer a number of fundamental and puzzling questions about ourselves and the nature of the universe. The Associate in Arts in Philosophy for Transfer degree is designed to provide students with a common core of lower division courses required to transfer and pursue a baccalaureate (4-year) degree in Philosophy in the CSU system

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. Evaluate arguments to determine validity using two different methods.
2. State, explain and critically analyze competing theories in some of the following areas: Metaphysics, Epistemology, Political Philosophy, Philosophy of Religion, Aesthetics and Philosophy of Science.
3. State, explain and critically analyze the following two ethical theories: Kantianism and Utilitarianism.

## REQUIREMENTS:

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Philosophy for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a $C$ or better in each major course. A "P" (Pass) grade is not an acceptable grade for courses in this major.

## REQUIRED CORE:

PHIL 8*\# Introduction to Logic 3
PHIL 6*\# Introduction to Philosophy OR 3

PHIL 7*\# Introduction to Ethics
LIST A (Choose one course from the following):
3
PHIL 14*\# Modern Western Philosophy (3)
Any course no selected from the List of Core courses above
LIST B (Choose two courses from the following):
ADJU $15 \quad$ Concepts of Criminal Law (3)
BUAD $6 \quad$ Business Law (3)
ENGL 1B*\# Literature and Composition (3)
HIST 1A*\# Western Civilization (3)
HIST 1B*\# Western Civilization (3)
Any course not selected from List A above
LIST C (Choose one course)
Any course from List A or B not already used
*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 PHILOSOPHY FOR TRANSFER DEGREE REQUIREMENTS: Major <br> General Education <br> 37-39* <br> General Electives <br> 8 9-20*

Degree Total Will Not Exceed 60 Units
*Number will vary depending on units that double count.

## Physics

## Associate in Science for Transfer:

## SC Program: AS-T. 1004

PROGRAM DESCRIPTION: The Associate in Science in Physics for Transfer Degree (AS-T in Physics) provides students with the opportunity to meet the requirements for transfer to the California State University system in Physics or a similar major. In order to earn this degree a student must complete 60 required semester units of CSUtransferable coursework with a minimum GPA of 2.0. Completing this degree guarantees admission to the CSU system but not to a particular campus or major. The degree is designed to prepare students for upper division study in Physics and related fields. Physics graduates at the bachelor's level are qualified for employment by industry or government in a variety of technical positions. They also frequently enter graduate programs to pursue advanced degrees in Physics or related fields. Physics graduates are often well qualified for admission into professional programs in medicine or law. Those students interested in teaching at the high school level should know that the nation is experiencing a shortage of well qualified physics teachers. Current and prospective community college students interested in this degree are encouraged to meet with a Counselor to develop an educational plan that best meets their goals and needs.
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 appropriate physical principles and use appropriate mathematical techniques to analyze a given real world physical problem.
2. Demonstrate basic experimental knowledge including expericmental design, data analysis including error analysis, and interpretation of results.
3. Use computers and other technology as experimental and modeling tools.
4. Meet the requirements for transfer to a California State University with a major in Physics.

## REQUIREMENTS:

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Physics for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course. A "P" (Pass) grade is not an acceptable grade for courses in this major.

## REQUIRED CORE:

| PHYS 4A*\# | Physics (Mechanics) | 4 |
| :--- | :--- | :--- |
| PHYS 4B | Physics (Electricity and Magnetism) | 4 |
| PHYS 4C | Physics (Heat, Waves, Optics, and Modern Physics) | 4 |
| MATH 3A*\# | Calculus 3A | 4 |
| MATH 3B*\# | Calculus 3B | 5 |
| MATH 4A*\# | Calculus 4A | 4 |

Additional Recommended Preparation:
While these additional courses are not required for this degree, completing these courses will better prepare students for upper division coursework in physics. Some of these may be required for the Bachelor's degree. Check the catalog for the CSU campus to which you plan to transfer.
CHEM 1A/1B General Chemistry (10 units)
MATH 4B Differential Equations (4 units)
MATH $6 \quad$ Linear Algebra (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 PHYSICS FOR

``` TRANSFER DEGREE REQUIREMENTS:
\begin{tabular}{lr} 
Major & 25 \\
General Education & \(37-39^{*}\) \\
General Electives & \(3-4^{*}\) \\
\multicolumn{1}{c}{ Degree Total Will Not Exceed 60 Units } \\
Number will vary depending on units that double count.
\end{tabular}
```


## Psychology

## Associate in Arts for Transfer:

## SC Program: AA-T. 1006

PROGRAM DESCRIPTION: This program introduces students to psychology as the scientific study of human behavior and mental processes and the practical application of psychology to personal and social issues. The Associate in Arts in Psychology for Transfer degree is designed to provide students with a common core of lower division courses required to transfer and pursue a baccalaureate (4year) degree in psychology in the CSU system.

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. List and describe the major concepts, vocabulary, theoretical perspectives, and empirical findings of psychology.
2. Describe and apply basic research methods in psychology.
3. Practice critical thinking to solve problems related to behavior and mental processes.
4. Link psychological concepts and principles to relevant practical applications.

## REQUIREMENTS:

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Psychology for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course. A "P" (Pass) grade is not an acceptable grade for courses in this major.

## REQUIRED CORE:

MATH 14*\# Introduction to Statistics 4
PSYC 1A*\# General Psychology 3
PSYC 25 Introduction to Research Methods 3
LIST A (Choose one course from the following): 3-4
BIOL 1*\# Principles of Biology (4) OR
BIOL 10 \& 10L*\# Gen Biology and Gen Biology Lab (3/1)
BIOL 5*\# Introduction to Human Biology (3)
LIST B (Choose one course from the following):
Any List A course not used above (3-4)
ECE 1*\# Human Development (3)
ENGL 1B* Literature and Composition (3) OR
ENGL 1C Critical Reasoning, Reading, and Writing (3)
PSYC 15*\# Social Psychology (3)
SOC 1*\# Intro to Sociology (3)
Continued on next page...

Psychology AA-T Degree (continued):
LIST C (Choose one course from the following):
Any List A or List B course not used above
PSYC 5*\# Human Sexuality (3)
PSYC 14*\# Psychology of Personal/Social Adjustment (3)
PSYC 16* Health Psychology (3)
PSYC 17*\# Abnormal Psychology (3)
PSYC 20*\# Cross-Cultural Psychology (3)
PSYC 41 Cultural/Social Context of Childhood (3)
PSYC 46*\# Human Learning \& Memory (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 ARTS IN PSYCHOLOGY FOR TRANSFER DEGREE REQUIREMENTS:

| Major | $19-21$ |
| :--- | ---: |
| General Education | $37-39^{*}$ |
| General Electives | $18-20^{*}$ |
| Degree Total Will Not Exceed 60 Units |  |
| Number will vary depending on units that double count. |  |

## Sociology

## Associate in Arts for Transfer:

## SC Program: AA-T. 1002

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, problem-solving, 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.

## REQUIREMENTS:

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the

Associate in Arts in Sociology for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course. A "P" (Pass) grade is not an acceptable grade for courses in this major.

## REQUIRED CORE:

SOC 1*\# Introduction to Sociology
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*\# 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 ARTS IN SOCIOLOGY FOR |  |
| :---: | :---: |
| TRANSFER DEGREE REQUIREMENTS: |  |
| Major | 19 |
| General Education | 37-39* |
| General Electives | 11-17* |
| *Number will vary d | 0 Units count. |

## Studio Arts

## Associate in Arts for Transfer:

## SC Program: AA-T. 1005

PROGRAM DESCRIPTION: The AA-T in Studio Arts program provides a solid foundation in the fundamentals of art, including conceptual awareness of current issues in art, technical competencies, visual aptitudes, and skills in many areas of human interaction, including relationship building, intercultural competency, critical thinking, information competency, teamwork and leadership. Students develop an understanding of the principles of art and design while investigating concepts and applying these elements to two dimensional compositions and three dimensional forms. The Art program is academically grounded in the liberal arts tradition of cultural studies, history, philosophy, and technical processes. It provides a hands-on, learn-by-doing environment that gives students experiences and skills to complement many career paths. The AA-T in Studio Arts will align with the CSU Bachelor of Fine Arts and Bachelor of Arts Degrees.

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 to demonstrate informed, skilled and sensitive handling in the execution of two dimensional imagery and three dimensional forms.

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.

## Studio Arts AA-T Degree (continued):

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 history research.
5. Articulate in writing his/her objective and subjective understanding of two and three-dimensional works.
6. Orally evaluate the works of fellow students and implement suggestions made through the evaluation of his/her work by others.
7. Transfer to a California State University with a major in Studio Arts.

REQUIREMENTS:
In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Studio Arts for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course. A "P" (Pass) grade is not an acceptable grade for courses in this major.

## REQUIRED CORE:



## Theatre Arts

## Associate in Arts for Transfer:

## SC Program: AA-T. 1004

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 problemsolving 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, Jocobean and Restoration periods of Theatre 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.
6. Evaluate dramatic scripts relative to historical context and contemporary relevance.
7. Develop cooperation skills in working with people from diverse cultures.
8. Transfer to a California State University with a major in Theatre Arts.

## REQUIREMENTS:

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Theatre Arts for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a $C$ or better in each major course. A "P" (Pass) grade is not an acceptable grade for courses in this major.

REQUIRED CORE:

| THTR 1*\# | Introduction to Theatre Arts OR | 3 |
| :--- | :--- | :--- |
| THTR 8*\# | History of World Theatre I |  |
| THTR 12 | Acting I | 2 |
| THTR 16 | Acting Lab | 1 |
| Three units from the following: |  |  |
| THTR 23 | Mainstage Production I | 3 |
| THTR 26 | Mainstage Production II |  |
| THTR 41 | Theatre Lab |  |
| THTR 42 | Technical Stage Production |  |
| THTR 50 | Rehearsal and Performance |  |
| THTR 70 | Repertory Theatre - I |  |
| THTR 74 | Repertory Theatre - Technical |  |

LIST A (Choose at least three courses for a 9 unit minimum)
Note: There is a 3-unit maximum in Rehearsal and Performance courses, and if you used them I the core, then you cannot use them in List A. There is a 3-unit maximum in Technical Theatre Practicum courses, and if you used them in the core then you cannot use them in List A.
THTR 30 Stagecraft (3)
THTR 31 Introduction to Theatrical Design (3)
THTR $34 \quad$ Makeup (2) AND
THTR 38 Makeup Lab (1)
THTR $81 \quad$ Playwriting and Script Analysis (3)
Any Rehearsal and Performance or Technical Theatre Practicum course listed in Core but not used for Core requirements (1-3)
*May be used to fulfill CSU General Education requirements. See a counselor. \#May be used to fulfill IGETC requirements. See a counselor.

| ASSOCIATE IN ARTS IN THEATRE ARTS FOR |  |
| :--- | ---: |
| Major |  |
| TRANSFER DEGREE REQUIREMENTS: | 18 |
| General Education | $37-39^{*}$ |
| General Electives | $6-8^{\star}$ |
| Degree Total Will Not Exceed 60 Units |  |
| ‘Number will vary depending on units that double count. |  |

## Associate of Arts - 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 | Engineering | Natural Sciences |
| :--- | :--- | :--- |
| Allied Health | Geology | Oceanography |
| Behavioral Science | Humanities | Physical Education |
| Biological Sciences | Language Arts | Physical Sciences |
| Business Administration | Liberal Studies-Teaching Prep | Quantitative Reasoning |
| Child Development | Mathematics | Science Teacher - Earth |
| Criminal Justice | Meteorology/Climatology | Social Sciences |
| Earth System Science | Multicultural Studies | 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.
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.
$\begin{array}{ll}\text { ADJU 24 } & \text { CMST } 20 \\ \text { ANTH 2, 14, } 25 & \text { ECE } 28\end{array}$
ART 4 ENGL 10A, 10B, 18, 20, 24
ASL 1, 2, 3, 4
CHIN 1

FREN 1, 2, 3, 4
GEOG 1B, 7, 8

GERM 1, 2
HIST 2, 3, 25, 35, 36, 38
JAPN 1, 2, 3, 4
MUS 14
POLS 20

PSYC 20, 41
SOC 25, 30
SPAN 1, 2, 3, 4
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.
- 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 $I C^{3}$ 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.
- Minimum of three units to include the coursework options listed below with a grade of $C$ or better:

OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following: 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.

AA - University Studies Degree continued on next page...

## University Studies Degree Emphases (continued):

## 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

## 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 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.
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.

University Studies Areas of Emphasis continued on next page..

## Associate of Arts University Studies Areas of Emphasis:

## University Studies: Agriculture Sciences - 18 units

SC Program: AA. 1491
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.

Choose $12-18$ units (see a counselor to select the courses
appropriate for your transfer university):
AGAB 51 Agriculture Accounting (3)
AGAB 54 Agriculture Economics (3)
AGAS 11 Livestock Feeding and Nutrition (3)
AGAS 19 Principles of Animal Science (3)
AGPS 20 Plant Science (4)
AGPS 24 Soils (3)
CHEM 2A General Chemistry (5)
Choose the remaining $0-6$ units from the following courses:

| AG | $1,6,9 \mathrm{~A}, 58,94$ |
| :--- | :--- |
| AGAS | $10,11,15,19,30$ |
| AGEH | $22,23,26,27,28,29,31,31.1,31.2,31.3,33,34,35,36,37$, |
|  | $38,39,40,41,44,45,46,60,71,72,94$ |
| AGEQ | $12,13,14,21$ |
| AGMA | 42,44 |
| AGNR | $1,6,11,12,50,51,52,53,55,60,61,64,65,66 A, 69,70,83,94$ |
| AGPS | 25 |
| AGSA | 50,56 |
| AGVETT | 16 |
| AGVIT | 80,81 |
| CHEM | $2 B$ |
| MATH | 14 |

## University Studies: Allied Health - 20 units

SC Program: AA. 1511
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 $1 \quad$ Human Anatomy (5)

CHEM 2A Introduction to Chemistry (5)
MICR 1 Microbiology (5)
PHY 1 Physiology (5)

## University Studies: Behavioral Science -

## 19-21 units

SC Program: AA. 1499
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 19-21 units:
ANTH 2 Cultural Anthropology (3)
Choose one of the following:
BIOL $1 \quad$ Principles of Biology (4)
BIOL 5 Introduction to Human Biology (3)
BIOL $10 \quad$ General Biology (3)
PHY $1 \quad$ Physiology (5)
ECE $1 \quad$ Human Development (3)
MATH 14 Statistics (4)
PSYC 1A General Psychology (3)
SOC $1 \quad$ Introduction to Sociology (3)

## University Studies: Biological Sciences - 22 units

SC Program: AA. 1507
The Biological Sciences emphasis is designed to provide the lower division major preparation for transfer in Biological Sciences.

Complete the following 22 units:
BIOL $1 \quad$ Principles of Biology (4)
BOT $1 \quad$ General Botany (4)
CHEM 1A General Chemistry (5)
CHEM 1B General Chemistry (5)
ZOOL $1 \quad$ General Zoology (4)

## University Studies: Business Administration -

20-21 units
SC Program: AA. 1492
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 14 units:
ACCT 2 Financial Accounting (4)
ACCT 4 Managerial Accounting (4)
ECON 1A Principles of Microeconomics (3)
ECON 1B Principles of Macroeconomics (3)
Choose 6-7 additional units:
BUAD 6 Business Law (3)
BUAD10 Introduction to Business (3)
CIS $1 \quad$ Computer Literacy Workshop (3)
MATH 14 Introduction to Statistics (4)

## University Studies: Child Development - <br> 18-20 units

SC Program: AA. 1495
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 (3) OR |
| :--- | :--- |
| ECE 9 | Child Growth and Development (3) |
| ECE 2 | Child, Family, and Community (3) |
| ECE 7 | Early Childhood Observation and Assessment (3) |
| ECE 15 | Child Health, Safety and Nutrition (3) |
|  |  |
| Choose 6-8 additional units from the following: |  |
| ECE 8 | Teaching Practicum for Young Children (5) |
| ECE 17 | Principles/Practices of Teaching Young Children (3) |
| ECE 20 | Introduction to Curriculum (3) |
| ECE 26 | The Child With Special Needs (3) |
| ECE 28 | Teaching in a Diverse Society (3) |
| ECE 52 | Guidance in Adult-Child Relations (3) |

## University Studies: Criminal Justice - 18 units <br> SC Program: AA. 1500 <br> 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. <br> Complete the following 6 units: <br> ADJU 10 Intro to Administration of Justice (3) <br> ADJU 15 Concepts of Criminal Law (3) <br> Choose 12 additional units: <br> ADJU $11,16,17,18,20,21,22,23,24,25,26,30,40$, 41, 42 (3 units each) <br> PSYC 1A General Psychology (3) <br> SOC $1 \quad$ Introduction to Sociology (3) <br> SOC 2 Social Problems (3)

## University Studies: Earth System Science - <br> 22 units

SC Program: AA. 1508
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 Earth System Science (3)
Choose at least 11 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 60 Environmental Science (3)
ASTR 1 Astronomy (3)
BIOL 1 Principles of Biology 4)
BIOL $10 \quad$ General Biology (3)
ESCI $1 \quad$ Physical Geology (4)
ESCI 14 Meteorology (4)
ESCI 15 Oceanography (4)
ESCI 18 Global Climate Change: Past, Present and Future (3)
Choose the remaining units from the following courses:

| Related Science courses: |  |
| :--- | :--- |
| BIOL 11 | Diversity of Live (3) |
| BIOL 12 | Field Biology (3) |
| CHEM 1B | General Chemistry (5) |
| ESCI 2 | Historical Geology (4) |
| ESCI 6 | Ancient Life (4) |
| ESCI 10 | Earthquakes/Volcanoes/Other Geologic Hazards (3) |
| NHS 15 | Natural History (3) |
| PHYS 2B | General College Physics (4) |
| Courses from supporting disciplines: |  |
| AGNR 1 | Introduction to Natural Resources (3) |
| AGNR 83 | Introduction to Global Positioning Systems (1) |
| CIS 1 | Computer Literacy Workhop (3) |
| GEOG 10 | Introduction to Geographic Information Systems (3) |
| MATH 3B | Calculus 3B (5) |
| MATH 14 | Introduction to Statistics (4) |

## University Studies: Engineering - 27-30 units

SC Program: AA. 1494
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 21 units:
MATH 3A Calculus (4)
MATH 3B Calculus (5)
MATH 4A Calculus (4)
PHYS 4A Physics (Mechanics) (4)
PHYS 4B Physics (Electricity and Magnetism) (4)
Choose 6-9 additional units:
CHEM 1A General Chemistry (5)
CIS 61 C++ Language Programming (3)
ENGR 17 Circuits and Devices (4)
ENGR 35 Statics (3)
ENGR 45 Properties of Materials (4)
MATH 4B Differential Equations (4)
PHYS 4C Physics (Heat, Waves, Optics and Modern Physics (4)
```

General Education units are modified for this major.

## University Studies: Geology - 20 units

SC Program: AA. 1497
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 8 units:

| ESCI 1 | Physical Geology (4) |
| :--- | :--- |
| ESCI 2 | Historical Geology (4) OR |
| ESCI 6 | Ancient Life (4) |

Select one combination of the following Earth Science field courses to total 3 units:

Two 30-series ESCI courses: 32, 33, 34, 35, 36, 37, 38 (1.5 units each) OR
Three 40-series ESCI courses: 42, 43, 44, 45, 46 (1 unit each) OR
ESCI 26 or ESCI 27 (2 units each)
AND
One 40-series ESCI courses: 42, 43, 44, 45, 46 (1 unit each)
Choose 9 units from the following list to include at least one
additional science course (identified with an *):
Geology Courses:
*ESCI 3 Mineralogy and Crystal Optics (5)
*ESCI 4 Rock Origins and Relationships (4)
*ESCI 7 Introduction to the Geology of California (4)
*ESCI 9 Earthquakes/Volcanoes/Other Geologic Hazards (3)
*ESCI 10 Environmental Geology (4)
*ESCI 11 Economic Geology (3)
*ESCI 23 Introduction to Geology in the Field (2)
Supporting Disciplines:
AGNR 1 Introduction to Natural Resources (3)
AGNR 60 Environmental Science (3)
AGNR 83 Introduction to Global Positioning Systems (1)
*CHEM 1B General Chemistry (5)
CIS 1 Computer Literacy Workshop (3)
GEOG 10 Introduction to Geographic Information Systems (3)
MATH 3B Calculus 3B (5)
MATH 14 Introduction to Statistics (4)
*NHIS 15 Natural History (3)
*PHYS 2B General College Physics (4)

## University Studies: Humanities - 18 units

## SC Program: AA. 1513

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.

Choose 18 units from at least 3 of the following disciplines:
ART 1, 2, 3, 4, 6, 12, 21A
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. (American Sign Language, French, German, Japanese, Spanish)
HUM 2,4,70
MUS 1, 2, 3, 4, 5, 10, 11
PHIL
6, $7,8,5,10,11$
6, 7, 8
THTR
1, 5, 8, 9, 12, 13, 30, 31, 34
CMST
30
DAN (up to 3 units of Dance may apply to the emphasis)

## University Studies: Language Arts - $\mathbf{1 8}$ units

SC Program: AA. 1496
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.

Choose 18 units from at least two areas:
CMST $\quad 10,20,30,40,54,60$
ENGL 1B, 1C, 10AB, 11AB, 13AB, 14, 15, 16, 17, 18, 19, 20, $24,25,31,33,36$,
Foreign Languages:

| ASL | $1,1 \mathrm{~L}, 2,2 \mathrm{~L}, 3,4$ |
| :--- | :--- |
| FREN | $1,2,3,4$ |
| GERM | 1,2 |
| JAPN | $1,2,3,4,19,20$ |
| SPAN | $1,2,3,4,19,20$ |
| JOUR | $21,27,29$ |

University Studies: Liberal Studies -Teaching Prep - 29 units

SC Program: AA. 1504
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 29 units: |
| :--- |
| BIOL 10 | | General Biology (3) |  |
| :--- | :--- |
| BIOL 10L | General Biology Lab (1) |
| CMST 54 | Small Group Communication (3) OR |
| CMST 60 | Public Speaking (3) |
| ECE 1 | Human Development (3) |
| EDUC 1 | Introduction to Education and Teaching (3) |
| ESCI 12 | General Earth Science (4) OR |
| PHSC 1 | Physical Science Survey (4) |
| HIST 2 | World Civilization to 1500 C.E. (3) OR |
| HIST 3 | World Civilization: 1500 to Present (3) |
| HIST 17A | United States History (3) OR |
| HIST 17B | United States History (3) |
| MATH 41A | Concepts of Elementary Mathematics (3) OR |
| MATH 41B | Concepts of Elementary Mathematics (3) |
| POLS 2 | Introduction to American Government (3) |

## University Studies: Mathematics - 24 units

SC Program: AA. 1509
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 24 units:
MATH 3A Calculus 3A (4)
MATH 3B Calculus 3B (5)
MATH 4A Calculus 4A (4)
MATH 4B Differential Equations (4)
MATH 6 Linear Algebra (3)
MATH 14 Intro to Statistics (4)

## University Studies: Meteorology/Climatology -

## 18 units

SC Program: AA. 1506
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 10 units:
ESCI 14 Meteorology (4)
ESCl $17 \quad$ Earth System Science (3)
ESCI 18 Global Climate (3)
Choose the remaining 8 units from the following list to include at least one additional science course:

Related Science Courses:
AGNR 60 Environmental Science (3)
AGNR 61 Environmental Science Lab (1)
ASTR 1 Astronomy (3)
CHEM 1B General Chemistry (5)
ESCI 10 Environmental Geology (4)
ESCI 15 Oceanography (4)
NHIS 15 Natural History (3)
PHYS 2B General College Physics (4)
Courses from supporting disciplines:
AGNR 1 Introduction to Natural Resources (3)
AGNR 83 Introduction to Global Positioning Systems (1)
CIS 1 Computer Literacy Workshop (3)
GEOG 10 Introduction to Geographic Information Systems (3)
MATH 3B Calculus 3A (5)
MATH 14 Introduction to Statistics (4)

## University Studies: Multicultural Studies - 18 units

SC Program: AA. 1502
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 nonwestern cultures, an increasingly valuable knowledge base in our global society.

Choose 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

SC Program: AA. 1512
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.

| Choose 18 transferable units from the following disciplines: |  |
| :--- | :--- |
| AGAS | 19 |
| AGEH | 33 |
| AGNR | 60,61 |
| AGPS | 20 |
| ANAT | 1 |
| ASTR | 1 |
| BIOL | $1,5,6,10,11,12$ |
| BOT | 1 |
| CHEM | $1 \mathrm{~A}, 1 \mathrm{~B}, 2 \mathrm{~A}, 2 \mathrm{~B}, 10,11,70,70 \mathrm{~A}, 71,71 \mathrm{~A}$ |
| 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 | $2 \mathrm{~A}, 2 \mathrm{~B}, 4 \mathrm{~A}, 4 \mathrm{~B}, 4 \mathrm{C}$ |
| ZOOL | 1 |

## University Studies: Oceanography - 22 units

SC Program: AA. 1498
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 }14\mathrm{ units:
BIOL 1 Principles of Biology (4)
ESCI 1 Physical Geology (4)
ESCI 15 Oceanography (4)
ESCI 16 Coastal Oceanographic Field Studies (2)
```

Choose the remaining 8 units from the following transferable courses
to include at least one additional science course:
Related Science Courses:
AGNR 60 Environmental Science (3)
AGNR 61 Environmental Science Lab (1)
BIOL 12 Field Biology (3)
CHEM 1B General Chemistry (5)
ESCI 10 Environmental Geology (4)
ESCI 17 Earth System Science (3)
ESCI 37 Geology of the Northern California Coast (1.5)
ESCI 38 Geology of Point Reyes National Seashore (1.5)
NHIS 15 Natural History (3)
NHIS 65 Natural History of Patrick's Point (1)
PHYS 2B General College Physics

Courses from supporting disciplines:
AGNR 1 Introduction to Natural Resources (3)
AGNR 83 Introduction to Global Positioning Systems (1)
CIS 1 Computer Literacy Workshop (3)
GEOG 10 Introduction to Geographic Information Systems (3)
MATH 3B Calculus 3B (5)
MATH 14 Introduction to Statistics (4)

## University Studies: Physical Education - 18 units

SC Program: AA. 1493
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.

Choose 18 units from at least 3 areas:
ANAT 1
CHEM 1A, 1B, 2A, 2B
FSS 25
HLTH 1,2,3
KINES $\quad 1,2$
MATH $\quad 14$ or 2
PE $\quad 4,11,12 A, 12 B, 12 C, 15,16,17,20,23,30 A, 30 B$,
30C, 31, 32, 35, 37, 51A, 51B, 51C, 60, 62, 69, 70A, 70B, 70C, 71, 72, 73, 74, 75
PEAT $\quad 5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20$,
PHY
PHYS 2A, 2B
PSYC $23,24,25,26,29,30$

## University Studies: Physical Sciences - 22 units

SC Program: AA. 1510
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 22 units: |  |
| :--- | :--- |
| CHEM 1A | General Chemistry (5) |
| CHEM 1B | General Chemistry (5) |
| MATH 3A | Calculus (4) |
| PHYS 2A | General College Physics (4) AND |
| PHYS 2B | General College Physics (4) |
| OR |  |
| PHYS 4A | Physics/Mechanics (4) AND |
| PHYS 4B | Physics/Electricity and Magnetism (4) |

## University Studies: Quantitative Reasoning -

## 18 units

SC Program: AA. 1503
The quantitative reasoning emphasis is a flexibly designed option which, with proper counseling, provides transfer coursework toward majors in computer science and math

```
Choose a minimum of 18 units from the following mathematics and
computer science courses:
llath MATH 2, 2A, 3B, 4A, 4B, 6, 8, 9, 10, 13,14
```


## University Studies: Science Teacher - Earth 20 units

SC Program: AA. 1505
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 8 units:
ESCI $1 \quad$ Physical Geology (4)
ESCI 2 Historical Geology (4) OR

ESCI 6 Ancient Life (4)
Continued on next page..

University Studies: Science Teacher - Earth Emphasis (continued):
Choose the remaining 12 units from the following list to include at least six units from science courses:

| Science courses: |  |
| :--- | :--- |
| AGNR 60 | Environmental Science (3) |
| AGNR 61 | Environmental Science Lab (1) |
| ASTR 1 | Astronomy (3) |
| CHEM 1B | General Chemistry (5) |
| ESCI | 7, 9, 10, 14, 15, 17, 18, 32, 33, 34, 35, 36, 37, 38, 42, |
|  | 43, 44, 45, 46 |
| NHIS 15 | Natural History (3) |
| NHIS 65 | Natural History of Patrick's Point (1) |
| PHYS 2B | General College Physics (4) |
| Courses from supporting disciplines: |  |
| AGNR 1 | Introduction to Natural Resources (3) |
| AGNR 83 | Introduction to Global Positioning Systems (1) |
| CIS 1 | Computer Literacy Workshop (3) |
| GEOG 10 | Introduction to Geographic Information Systems (3) |
| MATH 3B | Calculus 3B (5) |
| MATH 14 | Introduction to Statistics (4) |

## University Studies: Social Sciences - $\mathbf{2 1}$ units

SC Program: AA. 1501
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.

Choose 21 units from at least three different disciplines:*

## ANTH 1, 2, 5, 14, 25

ARCH 3,4A
ECE $\quad 1,2,9$
ECON 1A, 1B
FSS 16, 18
GEOG $\quad 1 \mathrm{~A}, 1 \mathrm{AL}, 1 \mathrm{~B}, 5,7,8$
HIST 1A, 1B, 2, 3, 17A, 17B, 25, 35, 36, 38, 40, 55, 57
MATH 14*
POLS 1, 2, 20, 25
PSYC $\quad 1 A, 5,14,15,16,17,20,25,41,46$
SOC $\quad 1,2,15,22,25,30,70$
*Students can take MATH 14 as part of the 21 units, but it does not fulfill one of the three discipline requirements.

## University Studies: World Languages - 18 units

## SC Program: AA. 1514

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.

Choose 10-18 units from the courses listed below:
ASL 1 American Sign Language (4)
ASL $2 \quad$ American Sign Language 2 (4)
ASL 3 American Sign Language 3 (4)
ASL 4 American Sign Language (4)
FREN 1 Elementary French (5)
FREN $2 \quad$ Elementary French (5)
FREN 3 Intermediate French (3)
FREN 4 Intermediate French (3)
GERM 1 Elementary German (5)
GERM 2 Elementary German (5)
JAPN 1 Elementary Japanese (5)
JAPN $2 \quad$ Elementary Japanese (5)
JAPN 3 Intermediate Japanese (5)
JAPN $4 \quad$ Intermediate Japanese (5)
SPAN $1 \quad$ Elementary Spanish (5)
SPAN $2 \quad$ Elementary Spanish (5)
SPAN 3 Intermediate Spanish (3)
SPAN $4 \quad$ Intermediate Spanish (3)
Select the remaining $0-8$ units from:
Any course not used above
ASL 1L American Sign Language 1 Skill-Building Lab (1)
ASL 2L American Sign Language 2 Skill-Building Lab (1)
ENGL 10A World Literature (to 1650) (3)
ENGL 10B World Literature (after 1650) (3)
ENGL 25 Linguistics (3)
JAPN 19 Japanese Conversation 1 (2)
JAPN 20 Japanese Conversation 2 (2)
SPAN 19 Spanish Conversation and Culture (3)
SPAN 20 Spanish Conversation and Culture II (3)

## Associate of Arts Degree - Music (See main Degree and Certificate listings later in this Chapter)

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.

## 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.

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.

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

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
- 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.
- Minimum of three units to include the coursework options listed below with a grade of C or better:

OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
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.

## Associate of Science Degree (See main Degree and Certificate listings later in this Chapter)

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

AS Degree Requirements (continued):
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.
- 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.
- Minimum of three units to include the coursework options listed below with a grade of C or better:

OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following: 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.

## 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.

## Associate of Arts Degree - Art and Theatre Arts (See main Degree and Certificate listings later in this Chapter) <br> 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. Students are advised to consult a counselor before choosing the existing Theatre Arts Degree.

## 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
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 |

Continued on next page...

Associate of Arts Degree Requirements (continued):
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 | ECE 28 | JAPN 1, 2, 3, 4 |
| :--- | :--- | :--- |
| ANTH 2, 14, 25 | ENGL 10A, 10B, 18, 20, 24 | MUS 14 |
| ART 4 | FREN 1, 2, 3, 4 | POLS 20 |
| ASL 1, 2, 3, 4 | GEOG 1B, 7, 8 | PSYC 20, 41 |
| CHIN 1 | GERM 1, 2 | SOC 25, 30 |
| CMST 20 | HIST $2,3,25,35,36,38$ | SPAN 1, 2, 3, 4 |

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.
- 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 $I C^{3}$ 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.
- Minimum of three units to include the coursework options listed below with a grade of C or better:

OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following: 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.

## Associate of Science 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.

```
Agricultural Trades
Business - Basic Business
Climatological/Meteorological Studies
Coastal Oceanographic Studies
EMS - Emergency Medical Response
Fire - Fire Investigation
Fire - Fire Service Command, Company Officer
Fire - Wildland Fire Behavior
Food/Beverage/Lodging Management
Geologic Field Studies
```


## Health

Human Development
Humanities
Industrial Technologies
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.
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 Educ., 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.

Continued on next page...

Associate of Science General Studies Degree (continued):
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) | $\frac{3}{}$ |
| 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
ANTH 2, 14, 25
ART 4
ASL 1, 2, 3, 4
CHIN 1
CMST 20

ECE 28
ENGL 10A, 10B, 18, 20, 24
FREN 1, 2, 3, 4
GEOG 1B, 7, 8
GERM 1, 2
HIST 2, 3, 25, 35, 36, 38

JAPN 1, 2, 3, 4
MUS 14
POLS 20
PSYC 20, 41
SOC 25, 30
SPAN 1, 2, 3, 4
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.
- 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.
- Minimum of three units to include the coursework options listed below with a grade of C or better:

OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
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.

## Associate of Science General Studies Areas of Emphasis:

## General Studies: Agriculture Trades - 18 units

SC Program: AS. 1496
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.

## Choose 18 units from at least three of the following areas:

| AG | $1,6,9 A, 58$ |
| :--- | :--- |
| AGAS | $10,11,15,19,30$ |
| AGAB | $51,53,54$ |
| AGEH | $22,23,26,27,28,29,31,31.1,31.2,31.3,33,34,35$, |
|  | $36,38,39,40,41,44,45,46,60,71,72,122,125,130$ |
| AGEQ | $12,13,14,21,109,111,113$ |

AGMA
69, 70, 83, 173, 174, 176

AGPS 20, 24, 25, 126
AGSA 50,56
AGVETT 16
AGVIT 80,81

## General Studies: Business - Basic Business -

## 18 units

SC Program: AS. 1497
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 3-4 units from the following:

ACCT 2 Introduction to Financial Accounting (4)
ACCT 101 Basic Accounting I (3)
Choose 9-14 units from the following:
BUAD 6 Business Law I (3)
BUAD 8 Business Law II (3)
BUAD 10 Introduction to Business (3)
BUAD 12 International Business (3)
BUAD 15 Business and Society (3)
BUAD 40 Entrepreneurship and Small Business (3)
BUAD 41 Leadership and Supervision (3)
BUAD 42 Financing a Small Business (3)
BUAD 44 Investments (3)
BUAD 45 Human Relations on the Job (3)
BUAD 66 Business Communications (3)
BUAD 71 Introduction to e-Commerce (1)
BUAD 72 e-Commerce Marketing (1)
BUAD 80 Principles of Customer Services (3)
BUAD 91 Principles of Management (3)
BUAD 106 Business Mathematics (3)
BUAD 120 Starting a Small Business - The Entrepreneur (1)
Choose the remaining 0-6 units from the following:

## BUAD 76, 77, 176

CIS
1
DSS
10, 63
ECON 1A,1B
HOSP $\quad 10,20,35,40,45,50,60,65$

## General Studies: Climatological and

Meteorological Studies - 18 units

## SC Program: AS. 1513

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 10 units:
ESCI 14 Meteorology (4)
ESCI 17 Earth System Sciences (3)
ESCI 18 Global climate: Past, Present and Future (3)
Choose 4 units from the following:

| AGNR 60 | Environmental Science (3) AND |
| :--- | :--- |
| AGNR 61 | Environmental Science Lab (1) |
| ESCI 10 | Environmental Geology (4) |
| ESCI 15 | Oceanography (4) |
| PHYS 2B | General College Physics (4) |
| Choose 4 4 units from the following: |  |
| AGNR 1 | Introduction to Natural Resources (3) |
| AGNR 83 | Introduction to Global Positioning Systems (1 |
| ASTR 1 | Astronomy (3) |
| CIS 1 | Computer Literacy Workshop (3) |
| GEOG10 | Introduction to Geographic Information Systems (3) |
| MATH 14 | Introduction to Statistics (4) |

## General Studies: Coastal Oceanographic Studies

 20 unitsSC Program: AS. 1512
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 lab-based 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 10 units:
$\begin{array}{ll}\text { ESCI 1 } & \text { Physical Geology (4) } \\ \text { ESCI 15 } & \text { Oceanography (4) } \\ \text { ESCI 16 } & \text { Coastal Oceanographic Field Studies (2) }\end{array}$
Choose 3 units from the following:
BIOL $10 \quad$ General Biology (3)
BIOL 12 Field Biology (3)
ESCI 17 Earth System Science (3)
NHIS $15 \quad$ Natural History (3)
Choose 4 units from the following:

| AGNR 60 | Environmental Science (3) AND |
| :--- | :--- |
| AGNR 61 | Environmental Science Lab (1) |
| BIOL 1* | Principles of Biology (4) |
| ESCI 10 | Environmental Geology (4) |
| PHYS 2B | General College Physics (4) |
| *Recommended |  |
| Choose 3 units from the following: |  |
| AGNR 1 | Introduction to Natural Resources (3) |
| ACIS 1 | Computer Literacy Workshop (3) |
| GEOG 5 | Digital Plant: GIS and Society (3) |
| GEOG 10 | Introduction to Geographic Information Systems (3) |

## General Studies: EMS - Emergency Medical

Response - 18 Units
SC Program: AS. 1508
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 course:
FAID 175 Emergency Medical Technician 1 Basic (5)
Choose at least 13 units from the list below:
ANAT 1 Human Anatomy (5)
BIOL $5 \quad$ Introduction to Human Biology (3)
BIOL 6 Intro to Human Biology Laboratory (1)
FAID 132 Emergency Medical Responder (EMR) (2)
FAID 133 Certification CPR for the Professional Rescuer (.5)
FIRS 104 Firefighter I Academy (21)
FIRS 120 Incident Command System ICS-200 (1)
FSS $25 \quad$ Nutrition (3)
MICR 1 Microbiology (5)
PHY 1 Physiology (5)

## General Studies: Fire - Fire Investigation -

## 18 Units

SC Program: AS. 1507
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 13 units:
FIRS 71 Fire Behavior and Combustion (3)
FIRS $74 \quad$ Fire Protection Equipment and Systems (3)
FIRS $86 \quad$ Building Construction for Fire Protection (3)
FIRS $189 \quad$ Fire Investigation 1A (2)
FIRS $191 \quad$ Fire Investigation 1B (2)
Choose 5 units from the list below:
ADJU 16 Legal Aspects of Evidence (3)
ADJU $20 \quad$ Principles of Investigation (3)
CHEM 2A Introduction to Chemistry (5)
FTWL 101 Wildland Fire Behavior (3)
FTWO 112 Advanced Firefighter Training (.5)
FTWP 114 Wildfire Origin and Cause Determination (1.5)

## General Studies: Fire - Fire Service Command,

 Company Officer - 18 Units
## SC Program: AS. 1506

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 4 units:
FIRS $85 \quad$ Fire Command 1A (2)
FIRS $87 \quad$ Fire Command 1B (2)
Choose 14 units from the list below:

| FIRS 100 | Basic Fire Company Operations (2) |
| :--- | :--- |
| FIRS 108 | Firefighter II Academy (5) |
| FIRS 135 | Intermediate Incident Command System I-300 (1.5) |
| FIRS 136 | Advanced Incident Command System I-400 (1) |
| FTWL 102 | Wildland Firefighter Safety and Survival (3) |
| FTWL 103 | Wildland Fire Operations (3) |
| FTWO 114 | Initial Attack Incident Commander Type 4 (1.5) |
| FTWO 121 | Crew Boss S-230 (1.5) |
| FTWO 135 | Task Force/Strike Team Leader S-330 (1.5) |

## General Studies: Fire - Wildland Fire Behavior 18 Units

## SC Program: AS. 1509

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 4.5 units:
FTWO 113 Introduction to Wildland Fire Behavior S-190 (.5)
FTWO 132 Intermediate Wildland Fire Behavior S-290 (2)
FTWO 144 Intro. to Wildland Fire Behavior Calculations (2)
Choose 13.5 units from the list below:
CHEM maximum of 3 units
ESCI 14 Meteorology (4)
FIRS 101 Fire Technology Career Placement (1)
FTWL $101 \quad$ Wildland Fire Behavior (3)
FTWL 103 Wildland Fire Operations (3)
FTWO 111 Firefighter Training (2)
FTWO 112 Advanced Firefighter Training (2)
FTWO 128 Field Observer (1.5)
MATH 110 Essential Math (or equivalent) (3)

## General Studies: Food and Beverage and

Lodging Management - 18 units

## SC Program: AS. 1517

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.

Choose 12-18 units from the following courses:

| CULA | $45,46,48,49,50,55,59,60,65,66,73,74,75,76$, |
| :--- | :--- |
|  | $78,80,88,159,161,172$ |
| DSS | 10,63 |
| HOSP | $10,20,35,40,45,50,60,65$ |

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

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

## General Studies: Geologic Field Studies - 20 units

SC Program: AS. 1511
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 6 units:
ESCI $1 \quad$ Physical Geology (4)
ESCI $23 \quad$ Introduction to Geology in the Field (2)

Choose one 4-unit course from the list below:
ESCI $2 \quad$ Historical Geology (4)
ESCI 6 Ancient Life (4)
ESCI $7 \quad$ Introduction to the Geology of California (4)
ESCI 10 Environmental Geology (4)

Choose one 3-unit course from the list below:
ESCI $9 \quad$ Geologic Hazards (3)
ESCI $11 \quad$ Economic Geology (3)
Continued on next page...

General Studies: Geologic Field Studies Emphasis (continued):
Choose one combination of the following Earth Science field courses to total 4 units:
Two 30-series ESCI courses: 32, 33, 34, 35, 36, 37, 38 (1.5 units each) AND
One 40 series ESCI course: $42,43,44,45,47$ (1 unit each)
OR
ESCI 26 or ESCI 27
AND
Two 40 -series ESCI courses: 42, 43, 44, 45, 47 (1 unit each)
Choose 3 units from the following list:
AGNR 1 Introduction to Natural Resources (3)
CIS 1 Computer Literacy Workshop (3)
GEOG 5 Digital Planet: GIS and Society (3)
GEOG 10 Introduction to Geographic Information Systems (3)
NHIS 15 Natural History (3)

## General Studies: Health - 18 units

SC Program: AS. 1499
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.

```
Choose }18\mathrm{ units from at least two areas*:
DAN (activity)* 10,15,20,21,30,31,40,41,50
FAID 130,132,133,175,178
FSS 25
HLTH 1, 2,3
HEOC 10, 100, 130, 131, 160, 181
KINES 1,2
OAS 110
PE 4,35,36
PE (activity)* 11, 12A, 12B, 12C, 13, 14, 15, 16, 17, 20, 23, 26,
    30A, 30B, 30C, 31, 32, 37, 51A, 51B, 51C, 60, 62,
    69, 70A, 70B, 70C, 71, 72, 73, 74, 75
PEAT (activity)* 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, PE activity, and Athletics courses combined.

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

SC Program: AS. 1501
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.

Choose 18 units from at least two of the following areas:

| ECE | $1,2,3,4,6,7,8,9,10,12,14,15,16,17,20,22$, |
| :--- | :--- |
|  | $24,26,27,28,30,40,50,51,52$ |
| EDUC | 1 |
| EDTE | $51,52,61,62,71,72,73$ |
| FSS | $10,12,16,18,25,26,27,46,60$ |

## General Studies: Humanities - 18 units

SC Program: AS. 1515
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.

Choose 18 units from at least three of the following areas (with no more than 9 units of foreign language):
ART $\quad 1,2,3,4,6,12,13,15,16,17,21 \mathrm{~A}, 21 \mathrm{~B}, 23,26 \mathrm{~A}$, 26B, 29A, 29B, 31A, 31B, 35A, 35B, 45, 46, 50A, 55A, 55B, 57, 60A, 60B, 60C, 80A, 80B, 110, 121, 122, 123, 124, 125, 126
ASL $\quad 1,1 \mathrm{~L}, 2$ 2L, 3, 4
CMST $\quad 10,20,30,40,54,60$
DAN (Up to 3 units of Dance courses may apply)
ENGL $\quad 1 B, 1 \mathrm{C}, 10 \mathrm{AB}, 11 \mathrm{AB}, 12,13 \mathrm{AB}, 14,15,16,17,18$, 19, 20, 24, 25, 31, 33, 36, 91
FREN 1, 2, 3, 4
GERM 1,2
HUM 2, 4, 70
JAPN 1, 2, 3, 4, 19, 20
JOUR 21, 24, 27, 29
MUS $\quad 1,2,3,4,5,10,11,14,21 \mathrm{~A}, 22 \mathrm{~A}, 22 \mathrm{~B}, 25 \mathrm{~A}, 29,30$, $31,33,35,40,41,42,43,44,46,47$
PHIL 6,7,8
SPAN 1, 2, 3, 4, 19, 20, 151
THTR $1,5,8,9,12,13,23,26,29,30,31,34,41,42,50$, $51,52,60,70,74,81,153$

## General Studies: Industrial Technologies -

## 18 units

## SC Program: AS. 1500

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.

| AGMA | 42, 44 |
| :---: | :---: |
| AUTO | $\begin{aligned} & 1,10,20,21,130,131,147,150,161,162,163,180 \text {, } \\ & 181 \end{aligned}$ |
| CONS | $\begin{aligned} & 45,46,47,48,52,53,54,55,56,84,148,149,150 \text {, } \\ & 160,161,178 \end{aligned}$ |
| DIES | 48, 49, 158, 160, 161, 162, 164, 166, 170 |
| ENER | 50, 101, 102, 151 |
| ENGR | 1A, 1B, 2, 22, 24, 27, 29, 30, 31, 32, 33, 37, 38, 64, 120 |
| INDE | 1, 101, 102, 138 |
| WELD | $\begin{aligned} & 56,70,73,118,170,171,174,175176,178,182 \text {, } \\ & 184,186,188 \end{aligned}$ |
| WTT | 177, 180, 181, 183, 184, 186 |

## General Studies: Language Arts - 18 units

SC Program: AS. 1502
The emphasis in language arts allows students to explore the areas of both written and spoken English language, literature, and world languages.

```
Choose 18 units from at least two areas:
CMST 10, 20, 30, 40, 54, 60
ENGL \(\quad 1 B, 1 \mathrm{C}, 10 \mathrm{AB}, 11 \mathrm{AB}, 12,13 \mathrm{AB}, 14,15,16,17,18\),
    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
    JAPN 1, 2, 3, 4, 19, 20
    SPAN 1, 2, 3, 4, 19, 20
```


## General Studies: Natural Sciences - 18 units

SC Program: AS. 1514
This emphasis allows the student to explore the broad areas of life and physical sciences as a foundation for lifelong learning.

Choose 18 units from at least four of the following areas: Agriculture:
AGAS 19
AGEH 33

AGNR 60
AGPS 20
ANAT 1
ASTR 1

BIOL 1,5,6,10,11,12
BOT 1,50,52
CHEM 1A, 1B, 2A, 2B, 6, 10, 11, 16, 26, 70, 70A, 71, 71A,
ESCI $\quad 1,2,3,4,5,6,7,8,9,10,11,12,14,15,16,17,18$, $23,26,27,32,33,34,35,36,37,38,42,43,44,45$,

FSS
GEOG $\quad 1 \mathrm{~A}, 1 \mathrm{AL}, 10,21,24,25$
MICR 1
NHIS 15, 65, 105
PHSC 1
PHY 1
PHYS $\quad 2 \mathrm{~A}, 2 \mathrm{~B}, 4 \mathrm{~A}, 4 \mathrm{~B}, 4 \mathrm{C}$
ZOOL 1,15,63

## General Studies: Office and Computer <br> Technologies - 18 units

## SC Program: AS. 1498

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.

Choose 12 - 18 units from the following areas:
CIS $\quad 1,2,20,21,23,31,32,33,34,39,50,51,52,53,54$, $55,57,60,61,62,63,64,71,72,73,83,86,90,92$
OAS $\quad 10,11,12,30,51,52,53,64,80,84,91,92,93,94$, $112,113,114,152,158,160,166,171$

Choose $0-6$ additional units:
ACCT 101, 102, 103, 104
BUAD $\quad 10,45,66,71,72$

## General Studies: Public Safety and Services -

## 18 units

SC Program: AS. 1503
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 (3)
Choose the remaining }15\mathrm{ units from the following
ADJU 10,11,15,16,17,18,20,21,22,23,24,25,26,30,
    40, 41, 42, 100, 102, 106
```


## General Studies: Social Sciences - 18 units

SC Program: AS. 1516
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

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

| ANTH | $1,2,5,14,25$ |
| :--- | :--- |
| ARCH | $3,4 A, 5 A$ |
| ECE | $1,2,9$ |
| ECON | $1 A, 1 B$ |
| FSS | 16,18 |
| GEOG | $1 \mathrm{~A}, 1 \mathrm{AL}, 1 \mathrm{~B}, 2 \mathrm{~A}, 2 \mathrm{~B}, 5,7,8$ |
| 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 | $1 \mathrm{~A}, 5,14,15,16,17,20,41,46$ |
| SOC | $1,2,15,22,25,70$ |

## Associate of Science Degree (See the main Degree and Certificate listings later in this Chapter)

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 two-year 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
Agriculture-Equine Science
Agriculture-Forest Science and Technology
Agriculture-Horticulture and Landscaping
Agriclture-Natural Resources
Applied Geographic Information Systems
Automotive Technology
Business Administration
Accounting Concentration
General Business Concentration
Computer and Information Systems
Systems Management
Network Administration
Construction Technology

Dental Hygiene
Diesel Technology
Early Childhood Education
Family Studies
Fire Technology
Hospitality Management
Culinary Arts Concentration
Hotel/Restaurant Management Concentration
Nursing - Associate Degree Nursing
Office Administration
Administrative Office Professional
Health Information Management
Welding Technology

Continued on next page...

## Associate of Science Degree Requirements (continued):

## 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.
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 | $\frac{\text { Score }}{3}$ |
| :--- | :---: |
| College Board Advanced Placement Math Test (CALC or STAT) | 520 (Beginning 4/95) |
| Scholastic Aptitude Test - Mathematics (SAT-M) | 23 |
| American College Testing (ACT) - Math | 54 |
| COMPASS Algebra Test | 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 | CMST 20 | GERM 1, 2 | PSYC 20, 41 |
| :--- | :--- | :--- | :--- |
| ANTH 2, 14, 25 | ECE 28 | HIST 2, 3, 25, 35, 36, 38 | SOC 25, 30 |
| ART 4 | ENGL 10A, 10B, 18, 20, 24 | JAPN 1, 2, 3, 4 |  |
| ASL 1, 2, 3, 4 | FREN 1, 2, 3, 4 | MUS 14 | SPAN 1, 2, 3, |
| CHIN 1 | GEOG 1B, 7, 8 | POLS 20 |  |

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.
- 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.
- Minimum of three units to include the coursework options listed below with a grade of $C$ or better:

OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following: 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.

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 publishes a list annually that indicates which Shasta College courses are accepted for admission. This list is available in the Transfer Center, Shasta College 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 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 2014-2015 <br> Associate Degree - General Education 

## General Education-21 units (plus a major field of study $=60$ 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 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 Beg 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 1B Cultural Geog* GEOG 5 Digital Planet GEOG 7 Calif Geography* GEOG 8 World Reg Geog*

HIST 1AB Western Civil 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 West 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 Pers/Social Adj 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
ART 2 History of Art
ART 3 Western Art
ART 4 World Art*
ART 6 History/Modern Art
ASL 1 Am. Sign Lang 1* ASL 2 Am. Sign Lang 2*
ASL 3 Am. Sign Lang 3*
ASL 4 Am. Sign Lang 4*
CHIN 1 Mandarin Chinese* CMST 30 Oral Interpret

ENGL 1B Lit \& Comp
ENGL 10AB World Lit* ENGL 11A/B Survey/Am. Lit ENGL 13A/B Survey Eng Lit ENGL 14 Drama as Lit ENGL 15 Lit Women ENGL 16 Poetry ENGL 17 Shakespeare ENGL 18 African Amer Lit* ENGL 19 Bible as Literature ENGL 20 World Mythology*

ENGL 24 Multicult Persp* ENGL 25 Linguistics ENGL 31 Creative Writ ENGL 33 Fiction and Film ENGL 36 Children's Lit FREN 1/2/3/4 French* GERM $1 / 2$ German* HIST 2/3 World Civilization*

HUM 2 Explor Humanities HUM 4 Human thru Film HUM 70 Explor Cont TV JAPN 1/2/3/4 Japanese* JAPN 19+20 Japanese Conv MUS 10 Music Apprec MUS 11 Hist Jazz \& Rock MUS 14 World Music*

PHIL 6 Intro to Philosophy PHIL 7 Ethics:Right/Wrong PHIL 8 Logic PHIL 14 Mod Western Phil SPAN 1/2/3/4 Spanish* SPAN 19 Span Conv/Cult SPAN 20 Span Conver THTR 1 Intro to Theatre THTR $520^{\text {th }}$ Cent Theatre THTR 8 Hist/World Theatre THTR 9 Hist/World Theatre
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.

## 2014-15 Associate Degree - General Education (continued)

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 30 Oral Interpretation
CMST 54 Small Group Comm. CMST 60 Public Speaking
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 102 Inter Algebra
MATH 110 Essential Math
Other Math Courses:
MATH 2 Precalculus
MATH 2AB Precalc/Coll Algebra/Trig
MATH 3AB Calculus
MATH 8 Finite Mathematics

## MATH 9 Survey of Calculus

MATH 10 Plane Trigonometry
MATH 11 Patterns of Math
MATH 13 College Algebra/Liberal Arts MATH 14 Statistics
MATH 17 Calculus for Soc/Life Science MATH 41AB Conc./Elem Math

Other acceptable courses (if math competency has been satisfied):
CIS 2 Intro Computer Science
CIS 60 Visual Basic Programming
CIS 61 C++ Lang Programming
CIS 62 Java Programming
CIS 63 Assembler Lang Program.
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 to 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*

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*

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
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 1650)
ENGL 10B World Lit (after 1650)
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 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

## 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.
- 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.
- Minimum of three units to include the coursework options listed below with a grade of $C$ or better:

OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
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.

# Shasta College 2014-2015 <br> California State Universities - General Education 

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 54: Small Group Communication CMST 60: Public Speaking
A2: Written Communication
ENGL 1A: College Composition
A3: Critical Thinking
ENGL 1B: Literature \& Composition
PHIL 8: Logic
CMST 40: Argumentation and Debate
ENGL 1C: Crit. Reasoning/Reading/Writ
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

B2/B3: Life Sciences
AGAS 19: Principles of Animal Science
AGEH 33: Environ. Horticulture
AGNR 60: Environmental Science
AGNR 61: Environmental Science Lab
AGPS 20: Plant Science
ANAT 1: Human Anatomy
ANTH 1: Physical Anthropology

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

BIOL 1: Principles of Biology
BIOL 5: Human Biology
BIOL 6: Human Biology
BIOL 10: General Biology
BIOL 10L: General Biology Lab
BIOL 11: Diversity of Life
BIOL 12: Field Biology

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

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: Precalculus Mathematics
MATH 2A: Precalculus College Algebra
MATH 2B: Precalculus Trigonometry
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 for Liberal Arts MATH 14: Introduction to Statistics
MATH 17: Calculus for Soc/Life Sciences
MATH 41A: Concepts of Elementary Math MATH 41B: Concepts of Elementary Math

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 1650
**ENGL 10B: World Literature after 1650
ENGL 11A, 11B: Survey of American Lit.
ENGL 13A, 13B: Survey of English Lit.
ENGL 14: Drama as Lit
ENGL 15: Lit. By/About Women
ENGL 16: Poetry
ENGL 17: Intro to Shakespeare

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 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
HIST 2: World Civilization to 1500 C.E.
HIST 3: World Civilization: 1500 to Present

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

HUM 2: Exploring the Humanities
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 14: Modern Western Philosophy
SPAN 1, 2: Elementary Spanish
SPAN 3, 4: Intermediate Spanish
SPAN 19,20: Span Conversation/Culture I/ II

Shasta College 2014-15 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.


## 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:

ECE 1: Human Development
ECE 2: Child, Family, Community
ECE 9: Child Growth \& Development
FSS 16: Marriage and Family
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: Personal/Social Adjustment
PSYC 16: Health Psychology
SOC 22: Sociology of Aging
STU 1: College Success
$\underline{\text { CHICO STATE }}$ 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 (**) meet the Global Cultures requirement and are "concerned primarily with cultures and societies outside Western Heritage". They are ANTH 2, ANTH 14, ARCH 3, ART 4, ENGL 10A, ENGL 10B, ENGL 20, GEOG 1B, GEOG 8, HIST 36, HIST 38, 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 2014 through Summer 2015. See www. assist.org for prior years.

## Shasta College 2014-2015 IGETC

(Intersegmental General Education Transfer Curriculum)


#### Abstract

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 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 for Liberal Arts |
| :--- | :--- | :--- |
| MATH 3A: Calculus+ | MATH 6: Linear Algebra | MATH 14: Intro to Statistics |
| MATH 3B: Calculus | MATH 8: Finite Math | MATH 17: Calc. for Social/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 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

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

ENGL 20: World Mythology
ENGL 24: Multicult. Perspectives in Amer Lit
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
HIST 2: World Civilization to 1500 C.E.
HIST 3: World Civilization 1500 to Present
HIST 25: African American History

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

HUM 2: Exploring Humanities HUM 4: Humanities Through the Film
HUM 70: Exploring Contemporary TV
JAPN 2: Elementary Japanese
JAPN 3/4: Intermediate Japanese
PHIL 6: Intro. to Philosophy
PHIL 7: Ethics: Understand Right/Wrong
SPAN 2: Elementary Spanish
SPAN 3/4: Intermediate Spanish

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

ANTH 2: Cultural Anthropology
ANTH 5: Humanity, Culture and Ecology
ANTH 14: Religion, Myth, and Ritual
ANTH 25: Culture/History of N. Amer. Indian+
ARCH 3: Principles of Archaeology
CMST 10: Interpersonal Communication
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 1A: History of Western Civilization HIST 1B: History of Western Civilization 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 West 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: Personal/Social Adjustment
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.

## 2014-15 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

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 1: Principles of Biology
BIOL 5: Intro to Human Biology+
BIOL 6: Intro to Human Biology Lab+
BIOL 10: General Biology+
BIOL 10L: General Biology Lab

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: General College Physics +
PHYS 2B: General College Physics+
PHYS 4A: Physics Mechanics+

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

## AREA 6 - LANGUAGE OTHER THAN ENGLISH

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 |  |  |

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 2014 through Summer 2015. See www.assist.org for prior years.

## Shasta College 2014-15 Certificates

## Accounting Clerk/Bookkeeper

Agriculture - Equine Science
Agriculture - Equipment Operations and Maintenance
Agriculture - Horticulture
Horticulture and Landscaping Program
Irrigation
Landscape and Turf Management
Retail Nursery Sales
Agriculture - Livestock Quality Assurance
Agriculture - Natural Resources
Agriculture - Pest Control Advisor Preparation
Agriculture - Sustainable Practices
Applied Geographic Information Systems
Automotive Technology
Automotive Chassis
Automotive Electrical-Electronics
Automotive Engine Performance
Automotive Heating-Air Conditioning
Automotive Powertrain
Business Administration - Business Entrepreneurship
Business Retailing
Computer \& Information Systems
Cisco Networking
Network Administration
Web Design
Windows Server
Computer Maintenance
Construction Technology
CSU - General Education
Customer Service Academy
Diesel Technology
Dietary Service Supervisor
Early Childhood Education
ECE-Family Childcare
Firefighter 1 Certificate
Firefighter 2 Certificate
Fire Tech-Wildland Firefighter 1 Academy
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
Transition Certificate for Students with Disabilities
Watershed Restoration
Water/Wastewater Treatment
Welding

## 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:

## SC Program: CT. 3060

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.

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 3
ACCT 102 Basic Accounting II 3
ACCT 103 PC Accounting
ACCT 104 Payroll Accounting
BUAD 10 Introduction to Business
BUAD 66 Business Communications
BUAD 106 Business Mathematics
BUAD 166 Business English
OAS 10 Excel for Windows-I
OAS 51 Introduction to Keyboarding and Word
OAS 64 Computerized Ten-Key
OAS 166 Records Management
TOTAL UNITS FOR CERTIFICATE

[^0]
## Administration of Justice

## Associate in Science:

## SC Program: AS. 1001

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.

## DEGREE REQUIREMENTS:

## CORE COURSES:

ADJU $10 \quad$ Introduction to Administration of Justice 3
ADJU 15 Concepts of Criminal Law 3
ADJU 16 Legal Aspects of Evidence 3
ADJU 17 Principles and Procedures of the Justice System 3
ADJU 18 Community Relations 3
ADJU 20 Principles of Investigation 3
ADJU 23 Career Planning for Administration of Justice 3
ADJU 26 Courtroom Testimony/Report Writing 3
RESTRICTED ELECTIVES: (Choose six units)
ADJU 11 Traffic Control and Investigation (3)
ADJU 21 Police Field Operations (3)
ADJU 22 Juvenile Procedures (3)
ADJU 24 Multi-Cultural Issues/Law Enforcement (3)
ADJU 25 Substantive Law (3)
ADJU 30 Wildlife Law Enforcement (3)
ADJU 40 Introduction to Corrections (3)
Restricted Electives continued on next page...

Administration of Justice Degree Restricted Electives (continued):
ADJU $41 \quad$ Fundamentals of Crime and Delinquency (3)
ADJU 42 Interviewing and Counseling (3)
ADJU $45 \quad$ Criminal Street Gangs (3)
ADJU $46 \quad$ Narcotic and Drug Use (3)
CIS 1
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:

## SC Program: AS. 1518

PROGRAM DESCRIPTION: The Agricultural-Business major is designed for students interested in working in the area of agriculturalrelated 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 doubleentry 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.

## DEGREE REQUIREMENTS:

CORE COURSES:

| AG 1 | Career Planning for Agriculture | 2 |
| :--- | :--- | :--- |
| AG 6 | Career Placement - Ag and Natural Resources | 1 |
| AG 9A | Agriculture and Natural Resources Leadership I | 1 |
| AG 94 | Worksite Learning-Agriculture OR | 1 |
| AG 58 | Student Enterprise Projects |  |
| AGAB 53 | Introduction to Agriculture Business | 3 |
| AGAS 11 | Livestock Feeding and Nutrition | 3 |
| AGAS 19* | Principles of Animal Science | 3 |
| 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   <br> ELECTIVES: (Choose nine units) 9  <br> AGAB 51 Agriculture Accounting (3)  <br> ECON 1B* Agriculture Economics (3) Principles of Economics (3) OR <br> BUAD 76 Sales (3) OR  <br> BUAD 77 Principles of Marketing (3)  |  |  |

ADDITIONAL GENERAL EDUCATION REQUIRED:

| Computer Literacy test OR |  | $0-3$ |
| :--- | :--- | :---: |
| AGNR 52 | Computers in Ag and Natural Resources (3) |  |
| CMST 60* Public Speaking (3) OR 3 <br> CMST 54* Small Group Communication (3)  <br> ENGL 1A* College Composition  <br> MATH 102* Intermediate Algebra (5) OR $3-5$ <br> MATH 13* College Algebra for Liberal Arts (3) OR  <br> MATH 14* Introduction to Statistics (4) 3 <br> AREA 3: Humanities <br> AREA 5/6: <br> Multicultural/Living Skills  |  |  |

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:

SC Program: AS. 1493
PROGRAM DESCRIPTION: The Environmental Horticulture Degree is designed to prepare students to complete lower division coursework at Shasta College for transfer a B.S. degree in Agriculture with an option in crops horticulture and land resource management at CSU Chico. This degree would also prepare students to transfer to other CSUs but students should consult with Ag faculty or counselor regarding specific transfer requirements. Students interested in more details about this degree should contact the Horticulture Department 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 implement 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.
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.

## 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 33* | Environmental Horticulture OR | 3 |
| AGPS 20* | Plant Science |  |
| AGEH 35 | Landscape Design | 3 |

AGAB 54* Agriculture Economics 3
AGEH 38 Landscape and Turf Management 3
AGMA 44 Intro. to Construction Skills for Ag/Nat Res. 3
AGPS 24*
AGPS 24* Soils
CHEM 2A* Introduction to Chemistry
CMST 54* or A1* Small Group Communication
ENGL 1A* College Composition
HIST 17A* or 17B* U.S. History and Government
MATH 14* Introduction to Statistics
POLS 2* Introduction to American Government 3
SPAN 1* or C2* Elementary Spanish
RECOMMENDED COURSES (Not Required):
AGAS 19 Principles of Animal Science (3)
AGEH 31 Landscape Irrigation (3)
AGNR 52 Computers in Ag and Natural Resources (3)
CHEM 2B Introduction to Organic and Biochemistry (5)
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 | $51-53$ |
| Additional General Education | $9-12^{* *}$ |
| General Electives | -0 |
| Degree Total | $\mathbf{6 3 - 6 5 *}$ |

${ }^{* *}$ CSU Chico does not require Area C for high unit program.
*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:

## SC Program: AS. 1221

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.

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.

## Ag - Equine Science A.S. Degree (continued):

## 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.

## DEGREE REQUIREMENTS:

CORE COURSES:
AG 1 Career Planning for Agriculture 2
AG $6 \quad$ Career Placement - Ag and Natural Resources 1
AG 9A Agriculture and Natural Resources Leadership I 1
AG 94
AGAB 51
Worksite Learning
Agriculture Accounting
AGAB 54* Agriculture Economics
AGAS 11 Livestock Feeding and Nutrition 3
Horsemanship
Horse Husbandry
AGEQ 21 Horse Management
AGEQ 111 Handling Problem Horses
AGMA 44 Intro. to Const. Skills for Ag and Nat. Resources
AGNR 52 Computers in Agriculture/Natural Resources 3
AGPS 20* Plant Science 4
AGPS 24* Soils 3
AGVETT 16 Veterinary Practices 2
*May be used to fulfill General Education requirements. See a counselor.

| 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.

## Ag - Equine Science Certificate:

## SC Program: CT. 3160

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.

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
Caer Planning for Agn and Resource
AG 94
AGAS 11
AGEQ 12
AGEQ 13
Career Placement - Ag and Natural Resources $\frac{1}{3}$ Worksite Learning

3
AGEQ 14
Western Riding and Training
AGEQ 21 Horse Management
AGEQ 111 Handling Problem Horses
AGEQ 113 Horse Ownership and Basic Handing
AGMA 44 Intro. to Const. Skills for Ag/ Natural Resources 3
TOTAL UNITS FOR CERTIFICATE

## Agriculture -

## Equipment Operations \& Maintenance

## Ag - Equipment Ops \& Maintenance Certificate:

## SC Program: CL. 3425

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.

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

Continued on next page...

Ag - Equipment Operations and Maintenance Certificate (continued):
CERTIFICATE REQUIREMENTS:

| AGMA 44 WELD 70 | Intro. to Const. Skills for Ag and Nat. Res. OR 3 Beginning Welding |
| :---: | :---: |
| AGNR 66A | Watershed Restoration Practicum I 1 |
| Take two of the following courses: 6-6.5 |  |
| AGPS 24 | Soils (3) |
| CONS 149 | Class A \& B License Training (3) |
| DIES 48 | Hydraulics (3.5) |
| WELD 73 | Structural Steel Metal Fabrication (3) |
| CONS 45 | Career Planning/Leadership for Heavy Equip. 2 |
| CONS 46 | Equipment Operations and Maintenance 3 |
| CONS 47 | Project Construction for Equipment Operations 3 |
| CONS 48 | Surveying for Equipment Operators 2 |
| Take 1-4 units of the following courses: 1 -4 |  |
| CONS 55A | Equipment Operations Skills Development (1) |
| CONS 55B | Equipment Operations Pad Construction (1) |
| CONS 55C | Equipment Ops Roadway Construction (1) |
| CONS 55D | Equipment Ops Global Satellite System (1) |
| CONS 94 | Worksite Learning for Construction Tech (1-4) |
| MATH 100* | Technical Applications of Mathematics 3 |
|  | TOTAL UNITS FOR CERTIFICATE 24 -27.5 |

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

## Agriculture - <br> Forest Science and Technology

Ag - Forest Science \& Tech Associate in Science:

## SC Program: AS. 1494

PROGRAM DESCRIPTION: The job market in forestry is strong with respect to both permanent and seasonal employment. On average, $70-80 \%$ of seasonal Natural 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.

## DEGREE REQUIREMENTS:

CORE COURSES:
AGNR 1* Introduction to Natural Resources 3
AGNR 6 Native Plant Identification 3
AGNR 50 Natural Resources Measurements 4
AGNR 52 Computers in Agriculture/Natural Resources 3
AGNR 53 Forest Protection and Health 3.5
AGNR 65 Forest Ecology 3
AGNR 94 Natural Resources Worksite Learning 3
AGPS 24 Soil
BOT 1

FIRS 118 Introduction to Wildland Fire Fighting 1.5
GEOG 9 Map and Geospatial Principles 3
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 39 |
| Additional General Education | 18 |
| General Electives | $\mathbf{3}$ |
| 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 - Horticulture and <br> Landscaping

Also see Ag-Environmental Horticulture for Transfer Degree information

## Associate in Science:

## SC Program: AS. 1492

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. This degree will prepare students for jobs in both landscape and nursery areas. Job opportunities continue to outnumber the number of graduates in our local area. Career choices include 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 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.

## DEGREE REQUIREMENTS :

Some of these classes require math skills. Students are encouraged to begin taking math classes early in the program.

## 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 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/ Schedule 1
AGEH 33* Environmental Horticulture 3
AGEH 35 Landscape Design 3
AGEH 38 Landscape and Turf Management 3
AGEH 94 Horticulture Worksite Learning 3
AGMA 44 Introduction to Const. Skills for Ag and Nat. Res. 3
AGNR 52 Computers in Agriculture/Natural Resources 3
AGNR 66A Watershed Restoration Practicum I 1
AGNR 66B Watershed Restoration Practicum II 1
AGNR 83 Introduction to 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 | 43 |
| Additional General Education | 18 |
| General Electives | $\underline{0}$ |
| Degree Total | $\mathbf{6 1 *}$ |

*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 and Landscaping Certificate:

## SC Program: CT. 3441

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. This certificate will prepare students for jobs in both landscape and nursery areas. Career choices include 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.
Continued on next page...

## Ag - Horticulture and Landscaping Certificate (continued):

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

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 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 38 Landscape and Turf Management 3
AGEH 94 Horticulture Worksite Learning 3

AGMA 44
AGNR 52
AGNR 66A
AGNR 66B
AGNR 83
AGPS 24
ENGL 190
MATH 100

Intro. to Const. Skills for Ag \& Natural Res.
3
Computers in Agriculture/Natural Resources
Watershed Restoration Practicum I
Watershed Restoration Practicum II
Intro. to Global Positioning Systems (GPS) Soils
Reading \& Writing II **(see below for alternative)
Tech. App. of Math or Math Placement Level 3

TOTAL UNITS FOR CERTIFICATE
**Students may choose one of the following alternatives: ENGL 190 OR BUAD 166 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:

## SC Program: CL. 3426

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.

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 | 3 |
| Continued on next page... |  |  |

AGEH 35 Landscape Design 3
AGPS 25 California Water 3
Continued on next page...

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

SC Program: CL. 2424
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.

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.
AGEH 31.1 Landscape Irrigation - Design
AGEH 31.2 Landscape Irrigation - Installation
AGEH 31.3 Landscape Irrigation - Troubleshoot/Schedule
AGEH 38 Landscape and Turf Management
AGEH 75 Water Gardening

| 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 |  |

17

## Agriculture - Horticulture Retail Nursery Sales

## Certificate:

## SC Program: CL. 3423

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.

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:
15-17

```
RECOMMENDED COURSES (not required):
BUAD 45 Human Relations on the Job
BUAD 106 Business Mathematics
```


## Agriculture - Livestock Quality Assurance

## Certificate:

## SC Program: CL. 3446

PROGRAM DESCRIPTION: This certificate prepares the student for working in the Food (livestock) Animal Industry. The certificate would include training in beef, pork, lamb and goat quality assurances for food quality and safety. The student will learn laws and regulations involved in the meat and livestock industries. This certificate covers the basic skills of "Food Animal Production," including proper handling, vaccination, and medication protocols.
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. Choose and demonstrate proper vaccination protocols given a specific species of livestock and medication options.

## REQUIREMENTS FOR CERTIFICATE:

AG 1 Career Planning for Agricultur
AGAS 19 Animal Science
AGAS 30 Livestock Production
3

TOTAL UNITS FOR CERTIFICATE:

## Agriculture - Natural Resources

## Associate in Science:

## SC Program: AS. 1495

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.

## 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.

## DEGREE REQUIREMENTS:

CORE COURSES:
AGNR 1* Introduction to Natural Resources 3
AGNR 6 Native Plant Identification 3
AGNR 12 Environmental Policy and Law
AGNR 50 Natural Resource Measurements
AGNR 52 Computers in Agriculture/Natural Resources
AGNR 60* Environmental Science (GE-Natural Science)
AGNR 64* Watershed Management and Ecology
AGNR 65 Forest Ecology
AGNR 66A Watershed Restoration Practicum I
AGNR 70 Wildlife Management and Conservation 3
AGNR 94 Natural Resources Worksite Learning 1
AGMA 44 Intro. to Const. Skills for Ag/Natural Resources
AGPS 24* Soils
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 38 |
| Additional General Education | 18 |
| General Electives | $\underline{4}$ |
| 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.

## Ag - Natural Resources Certificate:

## SC Program: CT. 3442

PROGRAM DESCRIPTION: The Natural Resources curriculum is designed to meet the demand for trained personnel in a broad range of Natural Resource/Environmental Science fields in addition to numerous private organizations.
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. Be qualified to pursue seasonal job employment with the Federal Government, a State Agency, or a Private company in a field related to Forestry \& Natural Resources.
2. Be able to use a specified protocol following the scientific method to collect, analyze, evaluate, and document original research data.
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.

Continued on next page...

Ag - Natural Resources Certificate (continued):
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 Natural Resources 3
AGNR 6 Native Plant Identification 3
AGNR 50** Natural Resources Measurements 4
AGNR 66A** Watershed Restoration Practicum I
AGNR 70 Wildlife Conservation and Management
GEOG 9 Map and Geospatial Principles
Map and Geospatial Principles 3
TOTAL UNITS FOR CERTIFICATE
**These courses also count towards the Watershed Restoration Certificate.

## Agriculture - Pest Control Advisor Preparation

## Agriculture - Pest Control Advisor Preparation Certificate:

## SC Program: CT. 3450

PROGRAM DESCRIPTION: Pest Control Advisors (PCAs) are licensed professional production consultants who serve California agriculture, natural resource and horticulture producers. PCAs specialize in pest management, but they are also an important resource to producers in a wide range of production concerns related to plant health. This certificate satisfies the core-course requirements specified for option "3. b" in preparing to take the Pest Control Advisor's exam with the California Department of Pesticide Regulation. The following courses need to be completed with a 2.0 grade point average or better. Note: In addition to completing the course work, the Department of Pesticide Regulation requires PCA exam applicants to have completed 24 months of technical work experience before taking the exam.

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 the ability to communicate with clients, assess pest damage for ecological and economic sustainability, determine thresholds and implement IPM practices based on client/crop needs.
2. Explain and apply basic principles of soils, cation exchange capacity, entomology and botany to horticulture practices and pesticide mode of action.
3. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.
4. Demonstrate application of pesticides in a safe manner, include selecting proper PPE, mixing, calibration and application.

## REQUIREMENTS FOR CERTIFICATE:

To prepare for the PCA exam, students will need to complete 42 units of the required curricula specified in the core-curricula areas below with a 2.0 grade point or better in each course.
CATEGORY 1: PHYSICAL AND BIOLOGICAL SCIENCES:
Choose 12 units from the following courses:
12
AGNR 60 Environmental Science (3)
AGNR $65 \quad$ Forest Ecology (3)
AGPS $20 \quad$ Plant Science (4)
BIOL 1\# Principles of Biology (4)
BIOL $10 \quad$ General Biology Lecture (3)
BIOL 10L General Biology Lab (1)

BIOL $12 \quad$ Field Biology (3)
BOT 1\# General Botany (4)
CHEM 2B\# Intro to Organic Chemistry and Biochemistry (5)
CHEM 6 Intro to Chemistry Applied to the Environment (4)
CHEM 26 Fundamentals of Gen, Organic, and Biochem (4)
CHEM 70 or 71\# Organic Chemistry (4)
MICR 1\# Microbiology (5)
ZOOL 1\# General Zoology
CATEGORY 2: CROP HEALTH:
AGEH 31\# Landscape Irrigation 3
AGNR 70 Wildlife Conservation and Management 3
AGPS 24 Soils 3
CATEGORY 3: PEST MANAGEMENT AND METHODS:
AGEH 26 Integrated Pest Management 3
AGEH 61 Plant Protection Materials 3
CATEGORY 4: PRODUCTION SYSTEMS: 6
Choose 6 units from the following courses:
AGAS 11 Livestock Feeding and Nutrition (3)
AGAS 19 Principles of Animal Science (3)
AGAS 30 Livestock Production (3)
AGEH 22 Nursery Practices and Plant Propagation (2)
AGEH 27, 28, 29 Plant Identification (1 each for a total of 3)
AGEH 33 Environmental Horticulture (3)
AGEH 38 Landscape and Turf Management (3)
AGEH 60 Master Gardener Training (3)
AGEH 71/72 Organic Gardening (1 each)
AGNR 4 Introduction to Range Sciences (3)
AGNR 53 Forest Protection and Restoration (3)
AGNR 55 Introduction to Forest Operations (3)
AGVIT $81 \quad$ Vineyard Care (1)
RESTRICTED ELECTIVES:
9
Complete an additional 9 units from Categories 2-4 above
\#Indicates at least one prerequisite is required.
TOTAL UNITS FOR CERTIFICATE:

## Agriculture -

Sustainable Agriculture Science

## Associate in Science:

## SC Program: AS. 1519

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 broad-based 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.
Continued on next page...

Ag - Sustainable Ag Science Degree
Program Learning Outcomes (continued):
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.

## DEGREE REQUIREMENTS:

## CORE COURSES:

| AG 1 | Career Planning for Agriculture | 2 |
| :--- | :--- | :--- |
| AG 6 | Career Placement - Ag and Natural Resources | 1 |
| AG 9A | Agriculture and Natural Resources Leadership I | 1 |
| AG 94 | Worksite Learning OR | 1 |
| AG 58 | Student Enterprise Projects |  |
| AGAB 53 | Introduction to Agriculture Business | 3 |
| AGAS 11 | Livestock Feeding and Nutrition | 3 |
| AGAS 19** | Principles of Animal Science | 3 |
| AGMA 44 | Intro. to Cons. Skills for Ag/Natural Resources | 3 |
| AGPS 20* | Plant Science | 4 |
| AGPS 24* | Soils | 3 |
| AGSA 56 | Intro. to Sustainable Ag and Farm Management | 3 |
|  | TOTAL UNITS FOR CORE | 27 |

OPTION 1 - General Agri Science Concentration (Choose 8 units)
AGAB 51 Agriculture Accounting (3)
AGAB 54* Agriculture Economics (3)
AGMA 42 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)

| OPTION 2-Agriculture Education Concentration (Choose 9 units) |  |
| :--- | :--- |
| 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 Envir. Hort.(3) |
| AGEQ 13 | Horse Husbandry (3) OR |
| AGEQ 21 | 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 9 units with at least one course from each area)

| (Area 1) WILDLAND MANAGEMENT CURRICULUM |  |
| :--- | :--- |
| AGNR 4 | Introduction to Wildland and Range Ecology (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 | Landscape Irigation (3) OR |
| AGPS 25* | 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 |


| MATH 102* | Intermediate Algebra (5) OR | $3-5$ |
| :--- | :--- | :---: |
| MATH 13* | College Algebra for Liberal Arts (3) OR |  |
| MATH 14* | Introduction to Statistics (4) |  |



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 | $0-9$ |
| 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 - Sustainable Practices

## Certificate:

## SC Program: CL. 3447

PROGRAM DESCRIPTION: This certificate covers the basic skills of the Sustainable Agriculture and Ranching methods. The certificate would include training in both plant (crop) and livestock sustainable practices. Courses will include exploration of current sustainable practices and case studies of area farms and ranches. This certificate is a good avenue for students seeking an industry accepted certificate, employment in the sustainable plant or livestock related industries, or anyone interested in sustainable agriculture practices.
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. Identify sustainable agricultural practices, within both the plant (crop) and livestock industries.

## REQUIREMENTS FOR CERTIFICATE:

| AGAS 30 | Livestock Production | 3 |
| :--- | :--- | ---: |
| AGEH 26 | Integrated Pest Management | 3 |
| AGPS 20 | Plant Science | 4 |
| AGPS 24 | Soils | 3 |
| AGSA 56 | Sustainable Ag and Farm Management | 3 |
|  |  | $\mathbf{1 6}$ |

AGEH 26 Integrated Pest Management 3
AGPS 20 Plant Science 4
AGSA 56 Sustainable Ag and Farm Management 3
TOTAL UNITS FOR CERTIFICATE:

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.

## Applied Geographic Information <br> Systems

## Associate in Science:

## SC Program: AS. 1520

PROGRAM DESCRIPTION: The Associate of Science degree in Applied Geographic Information Systems (AGIS) provides students with skills, knowledge and experience in the application of GIS. Students complete courses in the technical aspects of GIS and information technologies, along with courses in fields to which GIS is commonly applied, including earth and social sciences, natural resources and engineering. Students gain knowledge of maps, geographic data, and imagery, while developing skills in data collection, analysis and map creation. As students progress through the program the applied field courses provide direction for learning about the application of GIS, which gives direction to GIS project work. Worksite learning allows students to gain GIS workplace experience in their chosen field and to develop contacts among the community of GIS professionals. Successful students will have strong computer and critical thinking skills. Refer to http://www.shastacollege.edu/gis for more information.
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 summarize key GIS concepts, applications and societal implications.
2. Perform GIS data acquisition, capture, editing, and attributing.
3. Manage GIS data through file management, database design, georeferencing and conversion.
4. Perform GIS analysis using queries, overlay functions, and models.
5. Produces a portfolio of maps demonstrating effective communication, design aesthetics, application of GIS tools and use of cartographic standards.
6. Employs best practices for GIS project design, planning, and implementation.
7. Effectively engages with community through projects, volunteer activities, user meetings and worksite learning.
8. Articulates key opportunities and challenges related to the application of GIS for a chosen application discipline.
9. Performs customization of GIS applications through programming and web map services.
10. Demonstrates effective written and oral communication as it pertains to a chosen application discipline.

## DEGREE REQUIREMENTS:

CORE:
GEOG 5*
Digital Planet: GIS and Society
GEOG 9
Map and Geospatial Principles
GEOG 10
Introduction to Geographic Information Systems 3
GEOG 12 GIS Data Design and Capture 3
GEOG 13
GIS Spatial Analysis
GEOG 14 GIS Cartography and Visualization 3
GEOG 15 Intro to Remote Sensing 3
GEOG 25 GIS Projects 1
GEOG 94 GIS Worksite Learning

INFORMATION TECHNOLOGIES:
Choose 6 units from the following courses:
CIS 2* Introduction to Computer Science (3)
CIS 20 Access for Windows I (1)
CIS 21 Access for Windows II (1)
CIS 23 Database Management Systems (3)
CIS $52 \quad$ Install and Configure Server 2012 (1)
CIS 53 Administering Server 2012 (1)
CIS 54 Configure Advanced Server 2012 Services (1)
CIS 61* C++ Programming (3)
CIS 62* Java Programming (3)
CIS 64 Web Programming using Java/ PHP/Flash (3)
GEOG 21 GIS-CAD Integration (1)
GEOG 24 Customizing GIS (1)
APPLICATION DISCIPLINES:
Choose 6 to 8 units from the following courses:
AGNR 1* Intro to Natural Resources (3)
AGNR $50 \quad$ Natural Resource Measurements (3)
ENGR 1A Measurements and Plane Surveying (3)
ENGR 27 Map and Computer-aided Drafting (3)
ESCI 5* Introduction to Geology (4)
ESCI 10* Environmental Geology (4)
GEOG 1A*\1AL Physical Geography (3/1)
GEOG 1B* Cultural Geography (3)
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | $36-38$ |
| Additional General Education | 18 |
| General Electives | $\mathbf{4 - 6}$ |
| 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.

## Applied Geographic Information Systems Certificate:

[^1]
## Applied Geographic Information Systems Certificate (continued):

## PROGRAM LEARNING OUTCOMES:

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

1. Explain and summarize key GIS concepts, applications and societal implications.
2. Perform GIS data acquisition, capture, editing, and attributing.
3. Manage GIS data through file management, database design, georeferencing and conversion.
4. Perform GIS analysis using queries, overlay functions, and models.
5. Produce a portfolio of maps demonstrating effective communication, design aesthetics, application of GIS tools and use of cartographic standards.
6. Employ best practices for GIS project design, planning, and implementation.
7. Effectively engage with community through projects, volunteer activities, user meetings and worksite learning.

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:

GEOG 5 Digital Plant: GIS and Society 3
GEOG 9 Map and Geospatial Principles 3
GEOG 10 Introduction to GIS 3
GEOG 12 GIS Data Design and Capture 3
GEOG 13 GIS Spatial Analysis
GEOG 14 GIS Cartography and Visualization
GEOG 15 Introduction to Remote Sensing
GEOG 25 GIS Projects
GEOG 94 GIS Worksite Learning
TOTAL UNITS FOR CERTIFICATE

## Art

## Associate in Arts:

## SC Program: AA. 1040

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 two-dimensional 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.

## DEGREE REQUIREMENTS:

CORE COURSES:
ART 2* History of Western Art Through Gothic Period
ART 3* Western Art, Renaissance to Contemporary 3
ART 12 Beginning Form, Design and Color 3
ART 13 Intermediate Form, Design and Color 3
ART 21A Beginning Freehand Drawing 3
ART 21B Intermediate Freehand Drawing 3
*May be used to fulfill General Education requirements.
RESTRICTED ELECTIVES: (Choose nine units)
ART 15 Three Dimensional Design (3)
ART 17 Shades, Shadows and Perspectives (3)
ART 26A Beginning Watercolor (3)
ART 26B Intermediate Watercolor (3)
ART 26C Advanced Intermediate Watercolor (3)
ART 26D Advanced Watercolor (3)
ART 29A Beginning Painting (3)
ART 29B Intermediate Painting (3)
ART 29C Advanced Intermediate Painting (3)
ART 29D Advanced Painting (3)
ART 31A Beginning Figure Drawing (3)
ART 31B Intermediate Figure Drawing (3)
ART 31C Advanced Intermediate Figure Drawing (3)
ART 31D Advanced Figure Drawing (3)
ART 35A Beginning Ceramics (3)
ART 35B Intermediate Ceramics (3)
ART $45 \quad$ Beginning Glass (3)
ART 46 Glass Blowing (3)
ART 50A Beginning Printmaking (3)
ART 50B Intermediate Printmaking (3)
ART 50C Advanced Printmaking (3)
ART 55A Beginning Sculpture (3)
ART 55B Intermediate Sculpture (3)
ART 55C Advanced Sculpture (3)
ART 57
ART 60A
ART 60B
ART Advanced Intermediate Darkroom Photography (3)
Advanced Darkroom Photography (3)
ART 70A Beginning Digital Photography (3)
ART 70B Intermediate Digital Photography (3)
ART 70C Advanced Intermediate Digital Photography (3)
ART 70D Advanced Digital Photography (3)

| ASSOCIATE IN ARTS DEGREE REQUIREMENTS: |  |
| :--- | :---: |
| Major | 27 |
| Additional General Education | 18 |
| General Electives | $\mathbf{1 5}$ |
| 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.

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.

## Automotive Technology

## Associate in Science:

SC Program: AS. 1050
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.

## DEGREE REQUIREMENTS:

## CORE COURSES:

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
AUTO 150 Introduction to Engine Machining
AUTO 161 Manual Drive Trains \& Axles
AUTO 162 Automatic Transmissions and Transaxles
AUTO 163 Automotive Heating \& Air Conditioning
ENGL 1A* College Composition
INDE $1 \quad$ Career Planning for Industrial Technology
MATH 110* Essential Math
2
3
5
3
4
3
4
1
3
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 46 |
| Additional General Education | 15 |
| General Electives | $\mathbf{0}$ |
| Degree Total | $\mathbf{6 1 *}$ |

*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 Certificate:

## SC Program: CT. 3010

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.

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 $\quad$ 는
AUTO 130 Automotive Steering \& Suspension 3
AUTO 131 Automotive Wheel Alignment 2
AUTO 147 Automotive Braking Systems
AUTO 150 Introduction to Engine Machining
AUTO 161 Manual Drive Trains \& Axles
AUTO 162 Automotive Transmissions and Transaxles
AUTO 163 Automotive Heating \& Air Conditioning
INDE 1 Career Planning for Industrial Technology
TOTAL UNITS FOR CERTIFICATE
3940
Online catalog revised on 6/2/2014

## Automotive Technology Automotive Chassis

## Certificate:

SC Program: CL. 3435
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.
Continued on next page...

Automotive Technology - Automotive Chassis Certificate (continued):
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.

## CERTIFICATE REQUIREMENTS:

AUTO 1 Vehicle Electrical Systems
AUTO 130 Automotive Steering \& Suspension 3
AUTO 131 Automotive Wheel Alignment 2
AUTO 147 Automotive Braking Systems 3
TOTAL UNITS FOR CERTIFICATE

## Automotive Technology - <br> Automotive Electrical-Electronics

## Certificate:

## SC Program: CL. 3436

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.

CERTIFICATE REQUIREMENTS:

| AUTO 1 | Vehicle Electrical Systems | 3 |
| :--- | :--- | :--- |
| AUTO 10 | Automotive Electronics | 3 |

TOTAL UNITS FOR CERTIFICATE

## Automotive Technology Automotive Engine Performance

## Certificate:

SC Program: CL. 3437
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.

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 13

## Automotive Technology Automotive Heating - Air Conditioning

## Certificate:

SC Program: CL. 3439
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 air-conditioning service practices.
4. Utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on automotive HVAC systems.

## CERTIFICATE REQUIREMENTS:

AUTO 1 Vehicle Electrical Systems
AUTO 10 Automotive Electronics
AUTO 163 Automotive Heating \& Air Conditioning

TOTAL UNITS FOR CERTIFICATE

[^2]
## Automotive Technology - <br> Automotive Powertrain <br> Certificate:

SC Program: CL. 3440
PROGRAM DESCRIPTION: Theory, operation, diagnosis, repair and maintenance of drivetrain and automatic transmissions: Single drydisc clutches, manual 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.

CERTIFICATE REQUIREMENTS:
AUTO 161 Manual Drive Trains \& Axles 3
AUTO 162 Automatic Transmissions and Transaxles 4
TOTAL UNITS FOR CERTIFICATE 7

## Business

## Associate in Science:

## SC Program: AS. 1085

PROGRAM DESCRIPTION: This degree prepares you to enter the workforce and have the skills you need to move up the career ladder. Your beginning career opportunities include entry-level marketing, management, entrepreneur, customer service representative and retail sales. The courses offered in this degree teach the skills necessary to be successful in business. 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.
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.

## DEGREE REQUIREMENTS:

CORE COURSES:
ACCT 101 Basic Accounting I 3
ACCT 102 Basic Accounting II 3
ACCT 103 PC Accounting 2

| BUAD 6 | Business Law I OR | 3 |
| :--- | :--- | :--- |
| BUAD 8 | Business Law II |  |


| BUAD 10* | Introduction to Business | 3 |
| :--- | :--- | :--- |
| BUAD 12 | International Business | 3 |


| BUAD 40 | Entrepreneurship and Small Business OR | 3 |
| :--- | :--- | :--- |
| BUAD 176 | Principles of Retailing |  |
| BUAD 41 | Supervision and Leadership | 3 |

BUAD 41 Supervision and Leadership 3
BUAD 45* Human Relations on the Job 3

BUAD 66* Business Communications 3
BUAD 71 Introduction to e-Commerce 1
BUAD 76 Sales OR 3
BUAD $77 \quad$ Principles of Marketing

BUAD 106 Business Mathematics 3
CIS 1 Computer Literacy Workshop 3
ECON 1B* Principles of Economics (MACRO) 3
OAS 10 Excel for Windows - I 1
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 43 |
| Additional General Education | 12 |
| General Electives | $\underline{5}$ |
| 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.

## Business Administration -

Accounting Concentration

## Associate in Science:

## SC Program: AS. 1081

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.
Continued on next page....

## Business Admin. - Accounting Concentration Degree (continued):

## 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.

## DEGREE REQUIREMENTS:

CORE COURSES:

| ACCT 101 | Basic Accounting I (3) AND | $6-8$ |
| :--- | :--- | ---: |
| ACCT 102 | Basic Accounting II (3) |  |
| OR |  |  |
| ACCT 2 | Introduction to Financial Accounting (4) AND |  |
| ACCT 4 | Introduction to Managerial Accounting (4) |  |
| ACCT 103 | PC Accounting | 2 |
| ACCT 104 | Payroll Accounting | 2 |
| ACCT 194 | Income Tax | 3 |
| BUAD 6 | Business Law I | 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 |
| CIS 1 | Computer Literacy Workshop | 3 |
| CIS 20 | Access for Windows-I (1) OR | $1-3$ |
| CIS 23 | Fundamentals of SQL (3) |  |
| OAS 10 | Excel for Windows I | 1 |
| OAS 11 | Excel for Windows II | 1 |
| OAS 51 | Introduction to Keyboarding and Word | 3 |
| OAS 64 | Computerized Ten-Key | 0.5 |

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

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | $37.5-41.5$ |
| Additional General Education | 15 |
| General Electives | $\mathbf{3 . 5 - 7 . 5}$ |
| 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.

## Business Administration - <br> Business Entrepreneurship

## Certificate:

SC Program: CL. 3055
PROGRAM DESCRIPTION: Students completing this certificate will have the foundation necessary to begin building a small business.

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. Present an outline of a well-structured business plan, beginning with the Title Page and ending with an Appendix. There are a total of 11 topics discussed in class.

## CERTIFICATE REQUIREMENTS:

ACCT 101 Basic Accounting I 3
BUAD 10 Introduction to Business 3
BUAD 40 Entrepreneurship and Small Business 3
BUAD 42 Financing a Small Business 3
BUAD 71 Introduction to e-Commerce 1
BUAD 120 Starting a Small Business 1
CIS 1 Computer Literacy Workshop 3
TOTAL UNITS FOR CERTIFICATE

## Business Retailing

## Certificate:

## SC Program: CT. 3351

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.

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/.

Continued on next page..

| Business Retailing Certificate (continued): |  |  |
| :--- | :--- | :--- |
| REQUIREMENTS FOR CERTIFICATE: |  |  |
| ACCT 101 | Basic Accounting I | 3 |
| BUAD 10 | Introduction to Business | 3 |
| BUAD 45 | Human Relations on the Job | 3 |
| BUAD 66 | Business Communications | 3 |
| BUAD 71 | Introduction to e-Commerce | 1 |
| BUAD 76 | Sales | 1 |
| BUAD 80 | Principles of Customer Service | 3 |
| BUAD 94 | Business Worksite Learning | 1 |
| BUAD 106 | Business Mathematics | 3 |
| BUAD 176 | Principles of Retailing | 3 |
| CIS 1 | Computer Literacy Workshop | 3 |
|  |  | $\mathbf{2 9}$ |

## Computer and Information SystemsSystems Management

## Associate in Science:

## SC Program: AS. 1157

PROGRAM DESCRIPTION: This degree combines the core business courses with courses in the Information Technolog (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.

## DEGREE REQUIREMENTS:

## CORE COURSES:

ART 80A Graphic Design 3
BUAD 10* Introduction to Business (fulfills GE requirement) 3
BUAD 66 * Business Communications 3
BUAD 71 Introduction to e-Commerce 1
BUAD 72 Commerce Marketing
BUAD $80 \quad$ Principles of Customer Service
CIS 2 * Introduction to Computer Science
CIS 20 Access for Windows
CIS 23 Fundamentals of SQL
CIS 60 * Visual Basic Programming
CIS 62* Java Programming
CIS 64 Web Programming Using JAVA/PHP/FLASH
CIS 73
CIS 83

## Photoshop

Web Design Using Dreamweaver

CIS 86 HTML 3
CIS 92 Computer Security 3
OAS 10 Excel for Windows - 1
*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.

## Computer and Information Systems Cisco Networking

## Certificate:

SC Program: CL. 3441
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.

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:

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
TOTAL UNITS FOR CERTIFICATE 16

## Computer and Information Systems Network Administration

## Associate in Science:

## SC Program: AS. 1158

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.

## DEGREE REQUIREMENTS:

CORE COURSES:
BUAD 41* Leadership and Supervision 3
BUAD 45 * Human Relations on the Job 3
CIS 2* Introduction to Computer Science 4
CIS 23 Fundamentals of SQL 3
CIS 31 Cisco CCNA 1 3
CIS 32 Cisco CCNA 2 3
CIS 33 Cisco CCNA 3 3
CIS 34 Cisco CCNA 4
CIS 50 Windows 8 - Configuration 1
CIS 51 Managing and Maintaining Windows $8 \quad 1$
CIS 52 Install and Configure Server 20121
CIS 53 Administering Server 20121
CIS $54 \quad$ Configure Advanced Server 2012 Server 1
CIS 55 Exchange Server 2010, Configuring 1
CIS 72 Fundamentals of Linux
CIS 90 A+ Certification Prep/Cisco IT Essentials I A+ Certification Prep/Cisco IT Essentials I 4 CIS 92 Computer Security
INDE 138 Fundamentals of Electronics
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 44 |
| Additional General Education | 18 |
| General Electives | 0 |
| Degree Total | $\mathbf{6 2}^{*}$ |

*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.

## CIS - Network Administration Certificate:

## SC Program: CT. 3106

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.

Continued on next page...

## CIS - Network Administration Certificate

Program Learning Outcomes (continued):
2. Demonstrate competence in the area of 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 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.

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 | 3 |
| :--- | :--- | :--- |
| 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 8 - Configuration | 1 |
| CIS 51 | Managing and Maintaining Windows 8 | 1 |
| CIS 52 | Install and Configure Server 2012 | 1 |
| CIS 53 | Administering Server 2012 | 1 |
| CIS 54 | Configure Advanced Server 2012 Server | 1 |
| CIS 55 | Exchange Server 2010, Configuring | 1 |
| CIS 90 | A+ Certification Prep/Cisco IT Essentials I | 4 |
| CIS 92 | Computer Safety | 3 |
| INDE 138 | Fundamentals of Electronics | 3 |

TOTAL UNITS FOR CERTIFICATE 35

## Computer and Information Systems Web Design

## Certificate:

SC Program: CL. 3115
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.

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 | 3 |
| :--- | :--- | :--- |
| BUAD 71 | Introduction to E-Commerce | 1 |
| CIS 2 | Introduction to Computer Science | 4 |
| CIS 64 | Web Programming Using Java/PHP/Flash | 3 |
| CIS 73 | Photoshop | 1 |
| CIS 83 | Web Design Using Dream Weaver | 2 |
| CIS 86 | HTML | 3 |

TOTAL UNITS FOR CERTIFICATE

## Computer and Information Systems Windows Server

## Certificate:

## SC Program: CL. 3444

PROGRAM DESCRIPTION: This certificate will prepare students for employment in the field of information technology networking. Jobs in this sector include computer network technician, network administrator, network manager, data files manager, back-up operator, network security technician, etc.

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. Plan an effective Windows Server Active Directory deployment.

## CERTIFICATE REQUIREMENTS:

BUAD 45 Human Relations
CIS 2 Introduction to Computer Science
CIS $50 \quad$ Windows 8 Configuring
CIS $51 \quad$ Managing and Maintaining Windows 8
CIS 52 Install and Configure Server 2012
Administering Server 2012
CIS 53
Configure Advanced Server 2012 Server
Exchange Server 2010, Configuring
TOTAL UNITS FOR CERTIFICATE

## Computer Maintenance

## Certificate:

SC Program: CL. 3429
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.

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 Introduction to Computer Science 4
CIS 31 Cisco CCNA $1 \quad 3$
CIS 90 A+ Certification Prep/Cisco IT Essentials I 4
INDE 138 Fundamentals of Electronics 3

TOTAL UNITS FOR CERTIFICATE

## Construction Technology

## Associate in Science:

## SC Program: AS. 1165

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.

## DEGREE REQUIREMENTS:

CORE COURSES:
CONS 52 Residential Estimating 3
CONS 53 Materials of Construction 3
CONS 54 Survey of the Building Industry 3
CONS 56 Essentials of Construction 3
CONS 84 Analysis of Construction Drawings/Specs 3
CONS 160 Carpentry Practices 5
CONS 161 Electrical, Plumbing and Mechanical Systems 5
CONS 178 Building Codes and Standards 3
ENER 50 Renewable Energy/Sustainable Development 2
INDE $1 \quad$ Career Planning for Industrial Technology
WELD $70 \quad$ Beginning Welding


| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 34 |
| Additional General Education | 21 |
| General Electives | 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.

## Construction Technology Certificate:

SC Program: CT. 3125
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.

Continued on next page...

## Construction Technology Certificate (continued):

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.

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 | 3 |
| CONS 84 | Analysis of Construction Drawings/Specs | 3 |
| CONS 160 | Carpentry Practices | 5 |
| CONS 161 | Electrical, Plumbing and Mechanical Systems | 5 |
| CONS 178 | Building Codes and Standards | 3 |
| MATH 100 | Technical Applications of Mathematics | 3 |

TOTAL UNITS FOR CERTIFICATE

## Customer Service Academy

## Certificate:

## SC Program: CL. 3133

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.

## REQUIREMENTS FOR CERTIFICATE:

BUAD 81 Stress Management in the Workplace . 5
BUAD 82 Managing Organizational Change $\quad .5$
BUAD 83 Conflict Resolution . 5
BUAD 84 Attitude in the Workplace 5
BUAD 85 Customer Service in the Workplace . 5
BUAD 86 Decision Making and Problem Solving 5
BUAD 87 Team Building . 5
BUAD 88 Communicating with People 5
BUAD 89 Time Management 5
BUAD 90 Values and Ethics . 5
TOTAL UNITS FOR CERTIFICATE
5

## Dental Hygiene

## Associate in Science:

SC Program: AS. 1173
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.

## 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. Final selection of qualified applicants is competitive. Specific information is available in the Selection Criteria tab on the website.

Students must meet all the following requirements for application:

1. Students must have a high school diploma or its equivalent
2. The "Prerequisite Science" courses listed below must be competed with a grade of $C$ or higher in each course and a minimum science 2.5 GPA.
3. Prerequisites must be completed upon application. No inprogress courses will be accepted.
[^3]| Dental Hygiene A.S. Degree (continued): |  |
| :--- | :--- |
|  |  |
| PREREQUISITE COURSES: |  |
| ANAT 1* | Anatomy |
| PHY 1* | Physiology (with Lab) |
| MICR 1* | Microbiology |
| ENGL 1A* | College Composition |
| CHEM 2A* | Introduction to Chemistry |
| CHEM 2B* | Introduction to Organic and Biochemistry |
| SOC 1* | Introduction to Sociology |
| PSYC 1A* | General Psychology |
| CMST 60* | Public Speaking OR |
| **CMST 10* | Interpersonal Communication |
| FSS 25* | Nutrition |

*May be used to fulfill General Education requirements.
** ONLY if completed with a grade of $C$ or higher during or prior to Spring 2014.

TOTAL PREREQUISITE UNITS

## HEALTH \& SAFETY CLINICAL CLEARANCE:

Upon acceptance for enrollment, 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) which includes adult, child \& infant resuscitation with two person rescue and AED training). Students are financially responsible for meeting these requirements according to established program process. Specific information is available on the Health and Safety Requirements tab on the website or students may call the Division Office (530-339-3600)

## 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.


## DEGREE REQUIREMENTS:

Students must be enrolled in the Dental Hygiene Program in order to take the courses listed below. Students must show competence in all semester courses (with a grade of $C$ or better) in order to progress through the curriculum. A failing grade in any theory or clinical course within a semester will require withdrawal or result in failure from the program.

## CORE COURSES:

| DNTL 10 | Oral Biology | 3 |
| :--- | :--- | :--- |
| DNTL 11 | Oral Radiology | 3 |
| DNTL 12 | Head and Neck Anatomy | 2 |
| DNTL 13 | Dental Health Education/Seminar | 2 |
| DNTL 14 | Introduction to Clinic | 4 |
| DNTL 20 | Local Anesthesia and Nitrous Oxide | 2 |
| DNTL 21 | General and Oral Pathology | 4 |
| DNTL 23 | Patient Management and Geriatrics | 2 |
| DNTL 24 | Clinical Practice I | 4 |
| DNTL 25 | Clinic I Seminar | 2 |
| DNTL 26 | Nutrition in Dentistry | 1 |
| DNTL 30 | Periodontology I | 3 |

DNTL 31 Pharmacology 2
DNTL 32 Dental Materials 2
DNTL 33 Advanced Clinical Topics 2
DNTL 34 Clinical Practice II 4
DNTL 35 Clinic II Seminar 1
DNTL 40 Periodontology II 1
DNTL 41 Practice and Financial Management 1
DNTL 42 Clinic III Seminar 2
DNTL 43 Clinical Practice III 4
DNTL 44 Community Oral Health 3
DNTL 45 Ethics and Jurisprudence 2
TOTAL MAJOR UNITS:
*May be used to fulfill General Education requirements.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 97 |
| Additional General Education | 6 |
| General Electives | $\mathbf{0}$ |
| 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:

## SC Program: AS. 1175

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.
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.

Continued on next page...

Diesel Technology A.S. Degree (continued):
DEGREE REQUIREMENTS:
CORE COURSES:
DIES 48 Hydraulics $\quad 3.5$
DIES 49 Advanced Hydraulics 3
DIES 94 Worksite Learning For Diesel Technology 1
DIES 160
Diesel Engine Electronic Control
Diesel Technology Field Training
Heavy Duty Power Train
Diesel Performance Analysis
Diesel Engines
Heavy Duty Braking Systems
College Composition
Career Planning for Industrial Tech. Essential Math
Beginning Welding
WELD $\quad 73,170,171,174,175$ or 178
*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 | $\mathbf{0}$ |
| 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.

## Diesel Technology

Certificate:

## SC Program: CT. 3134

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.

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 | Hydraulics | 3.5 |
| :--- | :--- | ---: |
| DIES 49 | Advanced Hydraulics | 3 |
| DIES 94 | Worksite Learning For Diesel Technology | $1-4$ |
| DIES 160 | Diesel Engine Electronic Control | 4 |
| DIES 161* | Diesel Technology Field Training | 2 |
| DIES 162 | Heavy Duty Power Train | 4 |
| DIES 164 | Diesel Performance Analysis | 4 |
| DIES 166* | Diesel Engines | 6 |
| DIES 170 | Heavy Duty Braking Systems | 4 |
| ENGL 190 | Reading \& Writing II | 4 |
| INDE 1 | Career Planning for Industrial Tech. | 1 |
| MATH 100 | Technical Applications of Mathematics | 3 |
| WELD 70 | Beginning Welding | 3 |
| WELD | 73, 170, 171, 174, 175 or 178 | 3 |
|  |  |  |
|  | TOTAL UNITS FOR CERTIFICATE | $\mathbf{4 5 . 5 - 4 8 . 5}$ |

## Dietary Service Supervisor

## Certificate:

## SC Program: CL. 3431

## Students interested in this certificate should contact the Health Sciences Division Dean at (530) 339-3609.

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.

Continued on next page...

Dietary Service Supervisor Certificate
Program Learning Outcomes (continued):
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.

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 gainfulemployment.

## REQUIREMENTS FOR CERTIFICATE:

CULA 50 Sanitation and Safety
DSS 10 Food Production Managemen
DSS 63 DSS Operations and Management 3
DSS 94 DSS Certificate Worksite Learning 3
FSS 25 Nutrition
Nutrition and Disease
FSS 27 Nutrition and Disease 2
TOTAL UNITS FOR CERTIFICATE

## Early Childhood Education

## Associate in Science:

## SC Program: AS. 1190

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. Twenty-one (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.

## DEGREE REQUIREMENTS:

CORE COURSES:

| ECE 1* $\quad$ 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 Early Childhood Program Administration 3
ECE 7 Early Childhood Observation \& Assessment 3
ECE 8 Teaching Practicum for Young Children 5
ECE 15 Child Health, Safety and Nutrition 3
ECE $17 \quad$ Principles/Practices of Teaching Young Children 3
ECE 20 Introduction to Curriculum 3
ECE 28 * Teaching in a Diverse Society
ECE 30 E.C. Curriculum: Physical Development 3
ECE 50 E.C. Curriculum: Cognitive Development 3
ECE 52 Guidance in Adult-Child Relations 3
RESTRICTED ELECTIVES: (Choose six units) 6
ECE 6 Exploring Family Childcare (1)
ECE 10 Early Childhood Learning (3)
ECE 12 Infant-Toddler Learning (3)
ECE 14 School Age and Adolescent Development (3)
ECE 16 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 Early Childhood Staffing and Management (3)
ECE 140 Essentials of 40 Developmental Assets (1)
ECE 147 Mental Health Awareness in ECE Programs (1)
ECE 152 The Young Child: Movement, Rhythm, and Singing (1)
ECE 155 The Young Child: Intro to the Montessori Method (1)
Continued on next page...

*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.

## Early Childhood Education Certificate:

## SC Program: CT. 3451

PROGRAM DESCRIPTION: The Early Childhood Education Certificate will offer students initial training to work with young children. After completion of the 26 -unit certificate requirements, the student will qualify 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. All certificate requirements must be completed with a "C" grade or better.
This 26 unit certificate is intended to fulfill the ECE requirement of a lower-division program of study that can transfer to the CSU system. With additional coursework, both at lower-division and upper-division levels, it prepares the student for in-depth coursework toward higher degree attainment. When the 26 -unit certificate is combined with 16 General Education units, it qualifies the student for a Child Development Permit issued by the Office of Teacher Credentialing, at the Teacher level.

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. Apply an understanding of principles of child development in planning exclusive and developmentally appropriate curriculum environments.
2. Exhibit skills in observation and documentation as a vehicle for child and program assessment 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. Establish and maintain safe and healthy learning environments for young children.
6. Upon completion of the ECE Certificate, 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.

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 gainfulemployment/.

## CERTIFICATE REQUIREMENTS:

ECE 2
Child, Family, Community
Early Childhood Observation and Assessment
3
ECE $7 \quad$ Early Childhood Observation and Assessment 3
ECE 8 Teaching Practicum for Young Children
ECE 9
Child, Growth and Development
ECE 15
Child Health, Safety and Nutrition
Principles/Practices of Teaching Young Children 3
ECE 20 Introduction to Curriculum 3
ECE 28 Teaching in a Diverse Society 3

TOTAL UNITS FOR CERTIFICATE 26

## Early Childhood Education Family Childcare

## Certificate:

SC Program: CL. 3154
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.
Continued on next page...

Early Childhood Education - Family Childcare Certificate
Program Learning Outcomes (continued):
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.

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 gainfulemployment/.

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:


## English as a Second Language Certificate of Completion <br> Certificate:

## SC Program: NCR. 1001

PROGRAM DESCRIPTION: This certificate of completion is comprised of six non-credit 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.

## REQUIRED NON-CREDIT COURSES:

ESL 331 Beginning Low
ESL 332 Beginning High
ESL 333 Intermediate
ESL 334 Intermediate High
ESL 336 Advanced

## Family Studies

## Associate in Science:

SC Program: AS. 1225
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.

## DEGREE REQUIREMENTS:

The student must complete the Core Courses listed below, required General Education, and electives to total 60 units to 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.
Continued on next page...

Family Studies A.S. Degree Core Courses (continued):
CORE COURSES:
CMST 10* Interpersonal Communication 3
ECE 1* Human Development 3
ECE 2* Child, Family and Community
FSS 10 Introduction to Human Services
$\begin{array}{lll}\text { FSS } 14 & \text { Introduction to Case Management } & 3 \\ \text { FSS 16* } & \text { Marriage \& Family } & 3\end{array}$
FSS 18* Adulthood and Aging 3

| FSS 25* | Nutrition OR | 3 |
| :--- | :--- | :--- |
| BIOL 5* | Introduction to Human Biology |  |


| BIOL 5* | Introduction to Human Biology |  |
| :--- | :--- | :---: |
| FSS 46* | Personal Finance $\underline{\text { OR }}$ | 3 |

$\begin{array}{llr}\text { FSS 60* } & \text { Life Management } & 3 \\ \text { FSS 94 } & \text { Family Studies \& Services Worksite Learning } & 1-4\end{array}$
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 | $46-49$ |
| Additional General Education | 9 |
| General Electives | $2-5$ |
|  | $\mathbf{6 0 *}$ |

*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:

## SC Program: AS. 1240

PROGRAM DESCRIPTION: The Fire Technology curriculum is planned to serve both as an in-service program and as a preemployment 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.

## 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.

## DEGREE REQUIREMENTS:

CORE COURSES:
BIOL 5* Introduction to Human Biology 3
CMST* CMST 10, 20, 54 or 60 3
FAID 175 EMT I Basic 5
FIRS 70 Fire Protection Organization 3
FIRS 71 Fire Behavior and Combustion 3
FIRS 72 Fire Prevention Technology 3
FIRS 74 Fire Protection Equipment and Systems 3
FIRS 79 Fundamentals of Personal Fire Safety
FIRS 85 Fire Command IA
FIRS 86 Building Construction for Fire Protection
FIRS 101 Career Placement
FIRS 189 Fire Investigation I
$-2$
FSS 25* Nutrition 3
*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:

## SC Program: CT. 3444

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.

Continued on next page..

## Firefighter 1 Certificate (continued):

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.

## CERTIFICATE REQUIREMENTS:

FIRS 104 Firefighter I Academy 21

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 1 or Firefighter 2. All certifications are approved by the California State Fire Marshal's Office.

## Firefighter 2

## Certificate:

## SC Program: CT. 3445

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.

## CERTIFICATE REQUIREMENTS:

$\begin{array}{llr}\text { CIRS 104 } & \text { Firefighter I Academy } & 21 \\ \text { FIRS 108 } & \text { Firefighter II Academy } & 5\end{array}$
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 1 or Firefighter 2. All certifications are approved by the California State Fire Marshal's Office.

## Fire Technology - <br> Wildland Firefighter 1 Academy

## Certificate:

## SC Program: CL. 3434

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 CalFire) 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.

## CERTIFICATE REQUIREMENTS:

FIRS 73 Wildland Firefighter I Academy 4

## Hospitality - <br> Baking - Culinary Arts Emphasis

## Certificate:

SC Program: CL. 3245
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.

CERTIFICATE REQUIREMENTS:
BUAD 106 Business Math or Math Placement Level 3 or higher 3
CULA 50 Safety and Sanitation2
CULA 172 Baking

TOTAL UNITS FOR CERTIFICATE

## Hospitality - <br> Bartender - Culinary Arts Emphasis

## Certificate:

## SC Program: CL. 3246

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 hose entering a new position and 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:

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

1. Describe commonly used beverages and their recipes used in the hospitality industry.
2. Define the differences between spirits, wines, fortified wines, and liquors.
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.

## CERTIFICATE REQUIREMENTS:

CULA 50 Safety and Sanitation 2
CULA 60 Beverage Management 2
CULA 73 Introduction to Wine 2
TOTAL UNITS FOR CERTIFICATE

## Hospitality - Dining Room Management - Culinary Arts Emphasis

## Certificate:

## SC Program: CL. 3248

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.

## CERTIFICATE REQUIREMENTS:

BUAD 106 Business Math or Math Placement Level 3 or higher 3
CULA 50 Safety and Sanitation
CULA 65 Dining Room Service 3
CULA 73 Introduction to Wine
HOSP 10 Introduction to Hospitality
HOSP 45 Restaurants, Hotels, and Lawful Management 2
TOTAL UNITS FOR CERTIFICATE
12-15

## Hospitality - Dining Room Staff - <br> Culinary Arts Emphasis

## Certificate:

SC Program: CL. 3249
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 entrylevel 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.

## CERTIFICATE REQUIREMENTS:

BUAD 106 Business Math or Math Placement Level 3 or higher 3
CULA 50 Safety and Sanitation
CULA 65 Dining Room Service 3
TOTAL UNITS FOR CERTIFICATE
5-8

## Hospitality - <br> Line Cook - Culinary Arts Emphasis

## Certificate:

SC Program: CL. 3251
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.

## 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.

CERTIFICATE REQUIREMENTS:
CULA 45 Basic Food Production 5
CULA 46 Advanced Foods
CULA 50 Safety and Sanitation 2
HOSP 10 Introduction to Hospitality 3
TOTAL UNITS FOR CERTIFICATE

## Hospitality - Winemaking and Marketing

## Certificate:

SC Program: CL. 3253
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.

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 gainfulemployment/.

## CERTIFICATE REQUIREMENTS:

AGEH 94 Horticulture Worksite Learning 1
AGVIT 80 Vineyard Design and Construction 1
AGVIT 81 Vineyard Care
$\begin{array}{ll}\text { AGVIT } 81 & \text { Vineyard Care } \\ \text { CULA } 66 & \text { Wine With Food }\end{array}$
CULA 73 Introduction to Wine
CULA 74 Wine Making I
CULA 76 Wine Making II
—————
CULA 78 Sensory Evaluation of Wine 2
CULA 80 Wine Sales and Marketing 3
CULA 88 Wines of the North State 1
TOTAL UNITS FOR CERTIFICATE

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.

## Hospitality Management - <br> Culinary Arts Concentration

## Associate in Science:

## SC Program: AS. 1292

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 qualityminded 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.

## DEGREE REQUIREMENTS:

## CORE COURSES:

BUAD 66* Business Communications 3
CULA 45 Basic Food Production 5
CULA 46 Advanced Foods
CULA 48 Gourmet Food Preparation
CULA 49 Menu Planning and Cost Analysis
Analysis
CULA 50 Sanitation and Safety
CULA 55 Purchasing
CULA 60 Beverage Management
CULA 65 Dining Room Service
CULA 75 Pastry
CULA 94 Culinary Arts Worksite Learning
CULA 159 Stocks, Soups, Sauces \& Basic Culinaly 1
CULA 161 The Art
CULA 172 Manger
Baking
FSS 25* Nutrition
HOSP 10 Introduction to the Hospitality Industry 3
HOSP 65 Hospitality Supervision 3
*May be used to fulfill General Education requirements. See a counselor.

| 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.

## Hospitality Management - Culinary Arts Concen. Certificate:

## SC Program: CT. 3246

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 qualityminded 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.

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 gainfulemployment/.

## 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 and 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:

## SC Program: AS. 1294

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.

## 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 | Wine with Food | 3 |
| HOSP 10 | Introduction to the Hospitality Industry | 3 |
| HOSP 20 | Hospitality Operations Management | 3 |
| HOSP 35 | Computer Applications in the Hosp. Industry | 3 |
| HOSP 40 | Human Res. Mgmt. in the Hospitality Industry | 3 |
| HOSP 45 | Restaurants, Hotels, and Lawful Management | 2 |
| HOSP 50 | Hospitality Marketing, Sales and Advertising | 3 |
| HOSP 60 | Hospitality and Financial Management | 3 |
| HOSP 65 | Hospitality Supervision | 3 |
| HOSP 94 | Hospitality Worksite Learning | 1 |

*May be used to fulfill General Education requirements.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 39 |
| Additional General Education | 18 |
| General Electives | 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.

## Hospitality Management - Hotel/Restaurant Management Concentration Certificate:

SC Program: CL. 3242
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.

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 gainfulemploy ment/.

## 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 Hosp. Industry | 3 |
| HOSP 40 | Human Resource Mgmt. in the Hosp. Industry | 3 |
| HOSP 94 | Hospitality Worksite Learning | 1 |
|  | TOTAL UNITS FOR CERTIFICATE | $\mathbf{1 6}$ |

## Industrial Technology Certificate

## Certificate:

SC Program: CL. 3430
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.

Continued on next page...

## Industrial Technology 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:

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

## CERTIFICATE REQUIREMENTS:

DIES 48 Hydraulics 3.5

INDE 101 Industrial Occupation Basics
INDE 138 Fundamentals of Electronics and Electricity 3
MATH 100 Technical Applications of Mathematics 3
WELD 70
Beginning Welding
TOTAL UNITS FOR CERTIFICATE:

## Life Management

## Certificate:

SC Program: CL. 3252
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.

## 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 Nutrition 3
FSS 46 Personal Finance 3
FSS 60 Life Management 3
TOTAL UNITS FOR CERTIFICATE

## Music

## Associate in Arts:

## SC Program: AA. 1360

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. Describe major concepts, vocabulary, theoretical perspectives, and creative performance practices of music.
2. Demonstrate ensemble specific performance practices and professional standards of conduct expected of ensemble participants.
3. Perform solo literature with an accompanist (if appropriate) using stylistically accurate rhythm, pitch, diction (or articulation) and musical expression. Included will be performance within formal recital settings.
4. Demonstrate the ability to "audiate" a musical score by sight singing tonal music and performing rhythms.
5. Demonstrate the ability to recognize and analyze patterns and musical function by aurally identifying and transcribing scales, modes, melodies, and harmonic progressions.
6. Demonstrate keyboard proficiency at the level required to perform theoretical concepts studied in music theory courses.

## DEGREE REQUIREMENTS:

Students must complete the Core and Restricted Elective courses. 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 by the transfer institution to show proficiency in the following areas: theory, keyboard skills, vocal skills, music history/appreciation, and applied musicianship.
Continued on next page...

Music A.A. Degree (continued):
CORE COURSES:
MUS 2 Diatonic Harmony and Musicianship 4
MUS 3 Advanced Diatonic Harmony and Musicianship 4
MUS 4 Chromatic Harmony
MUS 5 20th Century Harmony
MUS 10* Music Appreciation
MUS 48 Applied Music (four semesters, .5 units each)
MUS 61A Beginning Performance Analysis
MUS 61B Intermediate Performance Analysis
MUS 61C Advanced Intermediate Performance Analysis
MUS 61D Advanced Performance Analysis
MUS $64 \quad$ Beginning Keyboard Skills
MUS 65 Intermediate Keyboard Skills 1
MUS 66 Advanced-Intermediate Keyboard Skills 1
MUS 67 Advanced Keyboard Skills 1
RESTRICTED ELECTIVES: (Choose four units) 4
MUS 31 Chamber Choir (1)
MUS 33 Jazz Ensemble (1)
MUS $35 \quad$ Vocal Jazz Ensemble (1)
MUS 40 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 $47 \quad$ Shasta College Jazz Ensemble (1)
The following courses are not required but are recommended by the Department: MUS 11*, 14*, 25A, 25B, 25C, 25D, 29, and 30.
*May be used to fulfill General Education requirements.

| ASSOCIATE IN ARTS DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 31 |
| Additional General Education | 36 |
| General Electives | 0 |
| Degree Total | $\mathbf{6 7 *}$ |

*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.

## Music

Certificate:

## SC Program: CL. 3280

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. List and describe the major concepts, vocabulary, theoretical perspectives, and creative performance practices of music.
2. Demonstrate ensemble specific performance practices and professional standards of conduct expected of ensemble participants.
3. Perform solo literature with an accompanist (if appropriate) using stylistically accurate rhythm, pitch, diction (or articulation) and music expression.
4. Demonstrate the ability to "audiate" a musical score by sight reading and performing complex rhythms and by sight-singing chromatic, modulating, and post-tonal melodies.
5. Demonstrate the ability to recognize patterns and musical function by aurally identifying and transcribing scales, modes, post-tonal melodies, and complex harmonic progressions. Analyze chromatic harmonic progressions that include modulation using $20^{\text {th }}$ century techniques.

## CERTIFICATE REQUIREMENTS:

| MUS 2 | Diatonic Harmony and Musicianship | 4 |
| :--- | :--- | :--- |
| MUS 3 | Advanced Diatonic Harmony and Musicianship | 4 |
| MUS 4 | Chromatic Harmony | 4 |
| MUS 5 | 20th Century Harmony | 4 |
| MUS 48 | Applied Music (four semesters, .5 unit each) | 2 |
|  |  | 4 |
| RESTRICTED ELECTIVES: (Choose four units) |  |  |
| MUS 31 | Chamber Choir (1) |  |
| MUS 33 | Jazz Ensemble (1) |  |
| MUS 35 | Vocal Jazz Ensemble (1) |  |
| MUS 40 | Concert Choir (1) |  |
| MUS 41 | Shasta College Women's Ensemble (1) |  |
| MUS 42 | Shasta College Chorale (1) |  |
| MUS 43 | Shasta College Symphony Orchestra (1) |  |
| MUS 44 | Shasta College Youth Symphony (.5-1) |  |
| MUS 46 | Shasta College Symphonic Band (1) |  |
| MUS 47 | Shasta College Jazz Ensemble (1) | $\mathbf{2 2}$ |
|  | TOTAL UNITS FOR CERTIFICATE |  |

## Nurse Aide/Home Health Aide

## Certificate:

SC Program: CL. 3300
PROGRAM DESCRIPTION: These courses are designed to prepare students to perform the basic nursing skills required in acute hospitals, long-term care facilities, and home health care agencies. Special emphasis is placed on health care provisions and modifications in community health care settings.

These courses are offered to complete one after another within one semester, consisting of eight hours lecture and sixteen hours lab/clinical per week and is worth 12.5 units of college credit. These courses are approved by the State Department of Health Services.

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 from Shasta College. 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...

## Nurse Aide/Home Health Aid Certificate (continued):

## 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.

## REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM

Space in the program is limited. A new class is enrolled every semester. In order to be eligible to enroll in the NA and HHA courses, the student must complete the clinical requirements for immunizations and CPR certification. Students who have completed the requirements and submitted the appropriate forms will be added to the Wait List based on the date of submission of clinical requirement materials to the Health Sciences office. Students on the Wait List will be offered enrollment on a space available basis and will be contacted by the Health Sciences office to complete additional health and safety requirements (physical exam, TB screening, drug screening and criminal background check). Students must meet established physical criteria to participate in the clinical area. See program web page for specific information regarding enrollment

CERTIFICATE REQUIREMENTS:

| HEOC 130 | Nurse Assistant | 11 |
| :--- | :--- | ---: |
| HEOC 131 | Home Health Aide | 1.5 |
|  |  |  |
|  | TOTAL UNITS FOR CERTIFICATE: | $\mathbf{1 2 . 5}$ |

## Nursing - Associate Degree Nursing

## Associate in Science:

## SC Program: AS. 1380

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 (NCLEXRN) will pass their examination within the first six months of the first attempt.

## 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 ADN program, it is strongly recommended to complete the graduation requirement before entering the program.

## REQUIREMENTS FOR ENROLLMENT IN THE PROGRAM:

Space in the program is limited. A new class is enrolled every semester. In order to be eligible for enrollment, students must satisfy the prerequisites listed and 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 Application Process tab on the website or call the Division Office at (530-339-3600).

Students must meet all of the following requirements for application:

1. Students filing enrollment packets must have a high school diploma or equivalent.
2. 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.
3. Prerequisites must be completed upon application. No inprogress 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 1A* | College Composition | 4 |
| :--- | :--- | :--- |
| ANTH 2* | Cultural Anthropology OR | 3 |
| SOC 1* | Introduction to Sociology $\underline{\text { OR }}$ |  |
| SOC 2* | Social Problems |  |


| PSYC 1A* | General Psychology $\mathbf{O R}$ | 3 |
| :--- | :--- | :---: |
| PSYC 14* | Psychology of Personal/Social Adjustment |  |


| **CMST 10* | Interpersonal Communication OR | 3 |
| :--- | :--- | :--- |
| CMST 54* | Small Group Communication OR |  |
| CMST 60* | Public Speaking |  |

* May be used to fulfill General Education Requirements. See a counselor.
** ONLY if completed with a grade of C or higher during or prior to Spring 2014.


## TOTAL PREREQUISITE UNITS

## DEGREE REQUIREMENTS:

Students must be enrolled in the ADN Program in order to take the courses listed below. Students must show competence in both clinical and theory components (with a grade of C or better) in order to progress through the curriculum. A failing clinical grade in either theory or clinical will require withdrawal or result in failure of the program.
CORE COURSES:
REGN 1 Theoretical Foundations of Nursing Care 6.5
REGN 2 Clinical Foundations of Nursing Care 5.5
REGN 10 Theoretical Concepts Med/Surgical Nursing I 6.5
REGN 11 Clinical Concepts Med/Surgical Nursing I 4.5
REGN 12 Assessment Concepts Med/Surgical Nursing 1
REGN 20 Theoretical Concepts Med/Surgical Nursing II 7
REGN 21 Clinical Concepts Med/Surgical Nursing II 5
REGN 33 Theoretical Concepts Med/Surgical Nursing III 6
REGN 34 Clinical Concepts Med/Surgical Nursing III 6
TOTAL UNITS FOR CORE:

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 76 |
| Additional General Education | 6 |
| General Electives | 0 |
| Degree Total | $\mathbf{8 2 *}$ |

Continued on next page...

Associate Degree Nursing (continued):
*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.

The enrollment process for LVNs desiring to transition to RN has changed. For pertinent information see Advanced Placement tab on website or contact the Division at (530) 339-3600.

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 $21 X$, REGN 33X, and REGN $34 X$ 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:

## SC Program: CT. 3265

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.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please click on the Gainful Employment Information tab on our website.

## REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM:

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 and 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. Specific information is available in the Enrollment Process tab on our website Students must meet all of the following requirements for application:

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. No in-progress courses will be accepted.

| 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 | Psychology of Personal/Social Adjustment |  |

## TOTAL UNITS FOR PREREQUISITES

## HEALTH \& SAFETY CLINICAL CLEARANCE:

Upon acceptance for enrollment, 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) which includes adult, child \& infant resuscitation with two person rescue and AED training). Students are financially responsible for meeting these requirements according to established program process. Specific information is available on the Health and Safety Requirements tab on the website or students may call the Division Office (530-339-3600)

## CERTIFICATE REQUIREMENTS:

Students must be enrolled in the program in order to take the courses listed below.

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 grade in either theory or clinical components will require withdrawal or result in failure of the program.

| VOCN 160 | Foundations of Nursing Practice | 15 |
| :--- | :--- | :--- |
| VOCN 161 | Nursing of Adults | 13 |
| VOCN 162 | Nursing of Adults and Children | 13 |
|  |  | $\mathbf{4 1}$ |

RECOMMENDED COURSES (Not required):
ENGL 190 Reading and Writing II
MATH $220 \quad$ Basic Mathematics
OAS 110 Medical Terminology

## Office Administration Administrative Office Assistant

## Certificate:

SC Program: CL. 3091
PROGRAM DESCRIPTION: This certificate prepares students for work as an entry-level Administrative Assistant. Administrative Assistants work for supervisors, managers, and executives. Students learn the following skills:

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).
Keyboarding: 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.
Continued on next page...

## OAS - Administrative Office Assistant Certificate (continued):

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.

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 | .5 |
| OAS 152 | Keyboarding for Speed and Accuracy | .5 |
| OAS 158 | Office Procedures for Admin Assistants | 3 |
|  |  | 3 |
| RESTRICTED ELECTIVES: (Choose three units) |  |  |
| OAS 80 | Outlook (1) AND |  |
| OAS 166 | Records Management (2) |  |

## OR

OAS 110 Medical Terminology (3)
TOTAL UNITS FOR CERTIFICATE

## Office Administration - <br> Administrative Office Professional

## Associate in Science:

## SC Program: AS. 1397

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

## 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 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 53 Advanced Keyboarding and Word 3
OAS 64 Computerized Ten-Key . 5
OAS 80 Outlook 1
OAS $84 \quad$ Office Administration Worksite Learning 1
OAS 92 Word for Windows II 1
OAS 94 PowerPoint 1
OAS 152 Keyboarding for Speed and Accuracy 5
OAS 158 Office Procedures for Admin Assistants 3
OAS 166 Records Management 2
OAS 171 Proofreading Skills 2
RECOMMENDED COURSES (not required):
CIS 83 Web Design Using Dreamweaver (2)
OAS 12 Excel for Windows III (1)
OAS 93* Word for Windows III (1)
*May be used to fulfill General Education requirements. See a counselor.

| 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 on next page...

## Office Administration - <br> Administrative Office Professional Certificate:

## SC Program: CT. 3247

PROGRAM DESCRIPTION: This certificate prepares you to be an intermediate-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, 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.

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 I | 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 | .5 |
| OAS 80 | Outlook | 1 |
| OAS 84 | Office Administration Worksite Learning | 1 |
| OAS 92 | Word for Windows II | 1 |
| OAS 94 | PowerPoint | 1 |
| OAS 152 | Keyboarding for Speed and Accuracy | .5 |
| OAS 158 | Office Procedures for Admin Assistants | 3 |
| OAS 166 | Records Management | 2 |
| OAS 171 | Proofreading | 2 |
|  |  |  |
|  | TOTAL UNITS FOR CERTIFICATE | $\mathbf{3 3}$ |

RECOMMENDED COURSES (not required):
OAS 12 Excel for Windows III
OAS 93* Word for Windows III

## Office Administration -

Health Information Management

## Associate in Science:

## SC Program: AS. 1356

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.

## DEGREE REQUIREMENTS:

## CORE COURSES:

BIOL 5* Introduction to Human Biology 3
BUAD 45 * Human Relations on the Job 3
BUAD 66 * Business Communications 3
BUAD 166 Business English 3
CIS $1 \quad$ Computer Literacy Workshop
HEOC 10 Applied Pharmacology 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 Ten-Key . 5
OAS 110 Medical Terminology 3
OAS 112 Medical Coding
OAS 113 Advanced Medical Coding
OAS 114 Healthcare Billing and Reimbursement 3
OAS 150 Electronic Medical Records
OAS 152 Keyboarding for Speed and Accuracy
OAS 158 Office Procedures for Admin Assistants
171 Medical Transcription
OAS $171 \quad$ Proofreading Skills
2

RECOMMENDED COURSES (not required):
OAS 11 Excel for Windows II (1)
OAS 53 Advanced Keyboarding and Word (3)
OAS $80 \quad$ Outlook (1)
OAS $92 \quad$ Word for Windows II (1)
OAS 166 Records Management (2)
Continued on next page..

OAS - Health Information Management Degree (continued):
*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.

## Office Admin - Health Information Management Certificate:

## SC Program: CT. 3276

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.

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:

BIOL 5 Introduction to Human Biology 3
BUAD 166
CIS 1
HEOC 10
OAS 10
OAS 51
OAS 52
OAS 64
OAS 84
OAS 110
Business English 3

Computer Literacy Workshop
Applied Pharmacology
Excel for Windows I
Introduction to Keyboarding and Word
Intermediate Keyboarding and Word
Computerized 10-Key
Office Administration Worksite Learning
Medical Terminology
OAS 112 Medical Coding
OAS 113 Advanced Medical Coding
OAS 114 Healthcare Billing and Reimbursement
OAS 150 Electronic Medical Records
OAS 152 Keyboarding for Speed and Accuracy
OAS 158 Office Procedures for Admin Assistants
OAS 160 Medical Transcription
OAS 171 Proofreading Skills

TOTAL UNITS FOR CERTIFICATE

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)

## Theatre Arts

## Associate in Arts:

## SC Program: AA. 1458

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 problemsolving 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.

## DEGREE REQUIREMENTS:

CORE COURSES:

| THTR 1* | Introduction to Theatre Arts | 3 |
| :--- | :--- | :--- |
| THTR 8* | History of World Theatre I | 3 |
| THTR 12 | Acting I | 2 |
| THTR 23/26 | Mainstage Production I/II OR | 3 |
| THTR 70 | Repertory Theatre I | 3 |
| THTR 30 | Stagecraft | 3 |
| THTR 41 | Theatre Laboratory OR |  |
| THTR 74 | Repertory Theatre - Technical |  |

RESTRICTED ELECTIVES IN THEORY: (Choose six units) 6
THTR 5* 20th Century Theatre (3)
THTR 9* History of World Theatre II (3)
THTR $13 \quad$ Acting II (2)
THTR $29 \quad$ Directing (2)
THTR 31 Introduction to Theatrical Design (3)
THTR $34 \quad$ Makeup (2)
THTR $81 \quad$ Playwriting and Script Analysis (3)
Continued on next page...

Theatre Arts Degree (continued):
RESTRICTED ELECTIVES IN PRACTICUM: (Choose four units) 4
THTR 16 Acting Lab (1)
THTR 38 Makeup Lab (1)
THTR $42 \quad$ Technical Stage Production (1-4)
THTR 60 Special Projects-Production (1-2)
THTR 70 Repertory Theatre I (1-4)
THTR 74 Repertory Theatre - Technical (1-4)
THTR 97 Special Studio Topics: Theatre (1-3)
THTR 98 Special Topics: Theatre (1-3)
*May be used to fulfill General Education requirements. See a counselor.

| 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.

## Transition Certificate for Students with Disabilities

## Certificate:

## SC Program: CL. 3415

PROGRAM DESCRIPTION: This curriculum is designed to provide an integrated educational option for students transitioning to postsecondary 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.

## 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 | Reading/Writing for Life Skills (2 semesters) (4) | $4-6$ |
| OR |  |  |
| ADAP 256 | Reading \& Writing for Life Skills (2) |  |
| AND |  |  |


| ADAP 258 | Mathematics for Life Skills (2 semesters) (4) | $4-5$ |
| :--- | :--- | :--- |
| OR |  |  |
| ADAP 258 Mathematics for Life Skills (2) <br> MATH 220 Basic Math (3) |  |  |

## Watershed Restoration Certificate

## Certificate:

## SC Program: CL. 3421

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.

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 66A Watershed Restoration Practicum I 1
CONS 46 Equipment Operations and Maintenance 3

CONS $47 \quad$ Project Construction for Equipment Operations 3

TOTAL UNITS FOR CERTIFICATE

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.

## Water/Wastewater Treatment

## Certificate:

SC Program: CL. 3420
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 2A-Introduction 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.

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 Intermediate Water Treatment Tech 3
WTT 183 Intermediate Wastewater Treatment 3
WTT 184 Small Water Systems and Distribution 3
WTT 186 Advanced Wastewater Treatment 3
TOTAL UNITS FOR CERTIFICATE

## Welding Technology

## Associate in Science:

SC Program: AS. 1490
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 three 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.

## DEGREE REQUIREMENTS:

CORE COURSES:
DIES 48 Hydraulics 3.5
INDE $1 \quad$ Career Planning for Industrial Technology 1
MATH 110* Essential Math 3
WELD 70 Beginning Welding 3
WELD 73 Structural Steel Metal Fabrication 3
WELD 118 Blueprint/Specification Reading (Mechanical) 2
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 1.5
WELD 183 Advanced ARC Welding Specialty Lab 1.5
WELD 184 Advanced GTAW (TIG) Welding 1.5
WELD 186 Advanced Pipe Welding 2
WELD 188 Advanced GMAW (MIG) Welding 1.5
*May be used to fulfill General Education requirements. See a counselor.

| ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS: |  |
| :--- | ---: |
| Major | 38.5 |
| Additional General Education | 18 |
| General Electives | 3.5 |
| 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.

Welding Technology Certificate on next page

## Welding Technology Certificate:

SC Program: CT. 3430
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.

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:

| WELD 70 | Beginning Welding | 3 |
| :--- | :--- | ---: |
| WELD 73 | Structural Steel Metal Fabrication | 3 |
| WELD 118 | Blueprint \& Specification Reading | 2 |
| 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 | 1.5 |
| WELD 184 | Advanced GTAW (TIG) Welding | 1.5 |
| WELD 186 | Advanced Pipe Welding | 2 |
| WELD 188 | Advanced GMAW (MIG) Welding | 1.5 |

## TOTAL UNITS FOR CERTIFICATE 29.5

## 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 | 1.5 |
| :--- | :--- | ---: |
| WELD 183 | Advanced ARC Welding Specialty Lab | 1.5 |
| WELD 184 | Advanced GTAW (TIG) Welding | 1.5 |
| WELD 186 | Advanced Pipe Welding | 2 |
| WELD 188 | Advanced GMAW (MIG) Welding | 1.5 |

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.

## Chapter 6 - Course Descriptions

COURSE FAMILIES: Students are limited to a total of four enrollments within a family.

| FAMILY: | COURSES INCLUDED: |
| :---: | :---: |
| ART FAMILY |  |
| Visual Art Fundamentals | ART 12 Form, Design and Color <br> ART 13 Inter. Form, Design and Color <br> ART 15 Three Dimensional Design <br> ART 110 Mixed Media: Works on Paper |
| Drawing | ART 16 Pencil Rendering <br> ART 17 Shades/Shadows/Perspective <br> ART 21A Beginning Freehand Drawing <br> ART 21B Intermediate Freehand Drawing |
| Figure Drawing | ART 31A Beginning Figure Drawing ART 31B Intermediate Figure Drawing ART 31C Adv. Inter. Figure Drawing ART 31D Advanced Figure Drawing |
| Painting | ART 29A Beginning Painting <br> ART 29B Intermediate Painting <br> ART 29C Adv. Intermediate Painting <br> ART 29D Advanced Painting <br> ART 122 Portrait Painting <br> ART 123 Landscape Painting <br> ART 124 Painting |
| Water Media | ART 23 Pen, Brush and Ink <br> ART 26A Beginning Watercolor <br> ART 26B Intermediate Watercolor <br> ART 26C Adv. Intermediate Watercolor <br> ART 26D Advanced Watercolor <br> ART 125 Introduction to Watercolor <br> ART 126 Nature in Watercolor |
| Printmaking | ART 50A Beginning Printmaking ART 50B Intermediate Printmaking ART 50C Advanced Printmaking |
| Sculpture | ART 55A Beginning Sculpture ART 55B Intermediate Sculpture ART 55C Advanced Sculpture |
| Ceramics | $\begin{array}{ll}\text { ART 35A } & \text { Beginning Ceramics } \\ \text { ART 35B } & \text { Intermediate Ceramics } \\ \text { ART 37 } & \text { Sculptural Ceramics }\end{array}$ |
| Glass | ART 45 Beginning Glass <br> ART 46 Glass Blowing <br> ART 57 Sculptural Glass |
| Darkroom Photography | ART 60A Beg. Darkroom Photography ART 60B Inter. Darkroom Photography ART 60C Adv. Int. Darkroom Photography ART 60D Adv. Darkroom Photography |
| Digital <br> Photography | ART 70A Beginning Digital Photography ART 70B Int. Digital Photography ART 70C Adv. Inter. Digital Photography ART 70D Advanced Digital Photography |
| Graphic Design | ART 80A Graphic Design <br> ART 80B Intermediate Graphic Design <br> ART 121 Illustration |


| $\|$FAMILY: COURSES INCLUDED:  <br> DANCE FAMILY   <br> Modern Dance DAN 20A Beginning Modern Dance <br>  DAN 20B Intermediate Modern Dance <br>  DAN 20C Adv. Int. Modern Dance <br> DAN 20D Advanced Modern Dance    <br> Jazz Dance DAN 40A Beginning Jazz Dance  <br>  DAN 40B Intermediate Jazz Dance <br>  DAN 40C Adv. Intermediate Jazz Dance <br>  DAN 40D Advanced Jazz Dance  <br> Ballet DAN 30A Beginning Ballet  <br>  DAN 30B Intermediate Ballet <br>  DAN 30C Advanced Intermediate Ballet <br>  DAN 30D Adv. Ballet Pointe \& Partnering  <br> Choreography DAN 10 Dance Combinations <br>  DAN 15 Fundamentals of Choreography <br>  DAN 16 Inter. Choreog/Dance Analysis <br> DAN 17 Adv. Choreog/Dance Analysis  |
| :--- |
| Tap |


| MUSIC FAMILY |  |  |
| :--- | :--- | :--- |
| Piano | MUS 22A | Beginning Piano |
|  | MUS 22B | Intermediate Piano |
|  | MUS 22C | Advanced Intermediate Piano |
|  | MUS 22D | Advanced Piano |
|  | MUS 64 | Beginning Keyboard Skills |
|  | MUS 65 | Intermediate Keyboard Skills |
|  | MUS 66 | Advanced Inter. Keyboard Skills |
|  | MUS 67 | Advanced Keyboard Skills |
| Strings | MUS 21A | Beginning Guitar |
|  | MUS 21B | Intermediate Guitar |
|  | MUS 21C | Advanced Intermediate Guitar |
|  | MUS 21D | Advanced Guitar |
|  | MUS 25A | Beginning Strings |
|  | MUS 25B | Intermediate Strings |
|  | MUS 25C | Adv. Intermediate Strings |
|  | MUS 25D | Advanced Strings |
| Performance | MUS 61A | Performance Analysis |
| Analysis | MUS 61B | Inter. Performance Analysis |
|  | MUS 61C | Adv. Inter. Performance Analysis |
|  | MUS 61D | Advanced Performance Analysis |
| Vocal Technique | MUS 29 | Beginning Voice |
|  | MUS 30 | Intermediate Voice |


| PHYSICAL EDUCATION FAMILY |  |  |
| :--- | :--- | :--- |
| Fitness and | PE 11 | Fundamental Conditioning |
| Conditioning | PE 12A | Beg. Weight Training and Fitness |
|  | PE 12B | Inter. Weight Training and Fitness |
|  | PE 12C | Adv. Weight Training and Fitness |
|  | PE 15 | Aerobic Dance |
|  | PE 16 | Aerobic Exercise |
|  | PE 17 | Yoga |

Physical Education Families continued on next page...

| FAMILY: |  | COURSES INCLUDED: |
| :--- | :--- | :--- |
|  |  |  |
| Aquatics | PE 30A | Beginning Swimming |
|  | PE 30B | Intermediate Swimming |
|  | PE 30C | Advanced Swimming |
|  | PE 31 | Aqua Aerobics |
|  | PE 32 | Water Polo |
|  | PE 35 | Lifeguard Training |
|  | PE 37 | Springboard Diving |
| Racquet Sports | PE 51A | Beginning Tennis |
|  | PE 51B | Intermediate Tennis |
|  | PE 51C | Advanced Tennis |
| Individual Sports | PE 60 | Self Defense |
| and Team | PE 62 | Golf |
| Sports | PE 69 | Football |
|  | PE 70A | Beginning Volleyball |
|  | PE 70B | Intermediate Volleyball |
|  | PE 70C | Advanced Volleyball |
|  | PE 71 | Softball |
|  | PE 72 | Baseball |
|  | PE 73 | Track and Field Techniques |
|  | PE 74 | Soccer |
|  | PE 75 | Basketball |


| THEATRE FAMILY |  |
| :---: | :---: |
| Acting | THTR 12 Acting I <br> THTR 13 Acting II <br> THTR 16 Acting Laboratory <br> THTR 81 Playwriting and Script Analysis |
| Rehearsal and Performance | *THTR 23 Mainstage Production I <br> *THTR 26 Mainstage Production II <br> *THTR 70 Repertory Theatre <br> *THTR 74 Repertory Theatre Technical <br> *THTR 153 Community Drama |
| Musical Theatre | *THTR 50 Stage Production <br> *THTR 51 Stage Prod. - Choreography <br> *THTR 52 Stage Production - Music |
| Theatre Practicum | THTR 29 Directing <br> *THTR 41 Theatre Laboratory <br> *THTR 42 Stage Production Lab |
| Theatre Studies | THTR 30 Stagecraft <br> THTR 31 Intro. to Theatrical Design <br> THTR 34 Makeup <br> THTR 38 Make-Up Lab |

*Variable unit course. When the student enrolls in this course (regardless of the unit value), it is counted as one of the four enrollments for the Family. The course can also be taken up to the maximum number of units stated for that specific course; the subsequent enrollments will not count towards the limit of four enrollments for the Family.

## ACCOUNTING (ACCT) <br> See Also: BUAD, CIS, OAS

ACCT 2 INTRODUCTION TO FINANCIAL ACCOUNTING - 4 Units Advisory: ENGL 190 or BUAD 166 with a grade of $C$ or higher or English Placement Level 6 or higher; and MATH 240 or MATH 260 with a grade of $C$ or higher or Math Placement Level 2 or higher.
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
This course is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the 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 4 Units <br> Prerequisite: ACCT 2 with a grade of C or higher

Advisory: MATH 101 with a grade of C or higher or Math Placement Level 3 or higher; and OAS 10 with a grade of C or higher or proficiency in creating, editing, formatting and printing spreadsheets using Excel.
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
This course is the study of how managers use accounting information in decision-making, planning, directing and controlling operations. The course focuses on cost terms and concepts, cost behavior, cost structure and cost-volume-profit analysis. Topics include issues relating to cost systems, cost control, profit planning, and performance analysis in manufacturing and service environments.

## ACCT 101 BASIC ACCOUNTING I-3 Units

Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)

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 for a small service 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: ACCT 101 or ACCT 2 with a grade of $C$ or higher Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
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: ACCT 101 or ACCT 2 with a grade of C or higher
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: ACCT 101 or ACCT 2 with a grade of C or higher; and BUAD 106 or Math Placement Level 3 or higher
Advisory: OAS 64 with a grade of $C$ or higher
Class Hours: 27 lecture/27 lab total (when offered in the Distance Education format, hours will total 108)
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) <br> Grading: Pass/No Pass Option <br> Advisory: English Placement Level 2 or higher <br> 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 in compliance with Title 5 regulations.

## 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 in compliance with Title 5 regulations.

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 253 ADAPTED MICROCOMPUTER KEYBOARDING - 1 Unit (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. This course may be repeated in compliance with Title 5 regulations.

## ADAP 254 ADAPTED COMPUTER SKILLS - 1 Unit <br> Grading: Pass/No Pass Option <br> 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. This course may be repeated in compliance with Title 5 regulations.

## ADAP 255 HUMAN AWARENESS AND LIFE SKILLS - 2 Units (formerly SPED 255) <br> Grading: Pass/No Pass Option <br> 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. This course may be repeated in compliance with Title 5 regulations.

## 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. 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. This course may be repeated in compliance with Title 5 regulations.

## ADAP 297 SPECIAL TOPICS IN SPECIAL EDUCATION -.5-2.0 Units (formerly SPED 297) <br> Grading: Pass/No Pass Option <br> 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. This course may be repeated in compliance with Title 5 regulations.

## ADAP 298 SPECIAL TOPICS IN SPECIAL EDUCATION -0.5-2.0 Units (formerly SPED 298) <br> Grading: Pass/No Pass Option <br> 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. This course may be repeated in compliance with Title 5 regulations.

## 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 inter-relationships; 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 <br> 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 <br> Grading: Pass/No Pass Option <br> Class Hours: 54 lecture total

This course offers an analysis of the doctrines of criminal liability in the United States and the classification of crimes against persons, property, morals, and public welfare. Special emphasis is placed on the classification of crime, the general elements of crime, the definitions of common and statutory law and the nature of acceptable evidence. This course utilizes case law and case studies to introduce students to criminal law. The completion of this course offers a foundation upon which upper-division criminal justice courses will build. The course will
also include some limited discussion of prosecution and defense decision making, criminal culpability, and defenses to crimes.

## ADJU 16 LEGAL ASPECTS OF EVIDENCE - 3 Units <br> Grading: Pass/No Pass Option <br> 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, privileged communication and witness competency. Required for Administration of Justice majors.

## ADJU 17 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM - 3 Units <br> Grading: Pass/No Pass Option <br> 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.

## ADJU 18 COMMUNITY RELATIONS - 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 examines the complex, dynamic relationships between communities and the justice system in addressing crime and conflict with emphasis on the challenges and prospects of administering justice within a diverse, multicultural population and the roles played by race, ethnicity, gender, religion, sexual orientation, age, social class, culture, and justice professionals in shaping relationships within the justice system. Special topics include crime prevention, restorative justice, and conflict resolution and pure justice. Required for Administration of Justice majors. This course may be offered in a distance education format.

## ADJU 20 PRINCIPLES OF INVESTIGATION - 3 Units <br> Grading: Pass/No Pass Option <br> 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, ethical issues in investigations and case preparation. Required for Administration of Justice majors.

## ADJU 21 POLICE FIELD OPERATIONS - 3 Units <br> Grading: Pass/No Pass Option <br> 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 (when offered in the Distance Education format, hours will total 162)
The organization function and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; and juvenile status and court procedures. This course may be offered in a distance education format.

## ADJU 23 CAREER PLANNING FOR ADMINISTRATION OF JUSTICE - 3 Units <br> Grading: Pass/No Pass Option <br> 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
Grading: Pass/No Pass 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 UnitsGrading: Pass/No Pass Option
Advisory: ENGL 190 with a grade of C or higher or English Placement Level 6 or higher
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 INTRODUCTION TO CORRECTIONS - 3 Units

 Grading: Pass/No Pass OptionClass Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course will provide a history of and critical analysis of punishment, the various types of punishment, alternatives to punishment, and the impact of punishment on the criminal justice system, corrections, a critical examination of the types of correctional institutions and the clients housed in each institution, and an examination of contemporary correctional issues. This course may be offered in a distance education format.

## ADJU 41 FUNDAMENTALS OF CRIME AND DELINQUENCY 3 Units <br> 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 delinquency; 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 <br> Grading: Pass/No Pass Option <br> 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 45 CRIMINAL STREET GANGS - 3 Units

## Class Hours: 54 lecture tota

This course will explore historical developments, origins, philosophy and current trends and activities in criminal street gangs within California; explore areas of violence, recruitment, drug use, graffiti and attire; emphasis placed on organization within gangs and racial backgrounds including types of solutions in the criminal justice system used to combat street gangs.

## ADJU 46 NARCOTIC AND DRUG ABUSE - 3 Units

Class Hours: 54 lecture total
This course will explore the Administration of Justice system and the development of drug policy and drug problems. This will include drug identification, drug user recognition, drug effects, narcotic enforcement, drug prosecution, and drug treatment, rehabilitation and education.

ADJU 94 ADMIN. 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.

## 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: ADJU 100 or previous completion of 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 106 SEXUAL ASSAULT AND DOMESTIC VIOLENCE EDUCATION \& TRAINING - 4 Units <br> Grading: Pass/No Pass Option <br> 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.

## 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) <br> 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 9A AGRICULTURE AND NATURAL RESOURCES
    LEADERSHIP I-1 Unit (formerly AG 9, ENVR 9)
Grading: Pass/No Pass Option
Note: Required field trips
Class Hours: }9\mathrm{ lecture/27 lab total
```

The 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.

## AG 9B AGRICULTURE AND NATURAL RESOURCES LEADERSHIP II - 1 Unit

Grading: Pass/No Pass Option
Note: Required field trips
Class Hours: 9 lecture/27 lab total
The course is designed to develop leadership qualities in students. Students will learn group dynamics and problem solving when working in committees. Event organizing, planning and follow up will be emphasized. "Hands-on" activities will emphasize these leadership development activities.

## AG 9C AGRICULTURE AND NATURAL RESOURCES LEADERSHIP III - 1 Unit

Grading: Pass/No Pass Option
Note: Required field trips
Class Hours: 9 lecture/27 lab total
The course is designed to develop leadership qualities in students especially as it relates to understanding personality types. Students will develop public speaking skills for prepared and extemporaneous topics and will analyze current trends, regulations and policies around agriculture and natural resource topics.

## AG 9D AGRICULTURE AND NATURAL RESOURCES LEADERSHIP IV - 1 Unit

Grading: Pass/No Pass Option
Note: Required field trips
Class Hours: 9 lecture/27 lab total
The course is designed to develop leadership qualities in students. Students will develop habits of successful people. Work with community and industry member's activities and events. Participate in leadership building skills, such as public speaking, job interviews and debate teams.

## 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. 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.

## 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) <br> Grading: Pass/No Pass Option <br> 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: AGAS 19 with a grade of $C$ or higher
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 - 3 Units (formerly AGRI 19) <br> Grading: Pass/No Pass Option <br> 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 <br> 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 (formerly HORT 23, HORT 32B) <br> Grading: Pass/No Pass Option <br> Class Hours: 18 lecture/54 lab total

This is required for all Environmental Horticulture majors. This handson 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)

Grading: Pass/No Pass Option
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 (formerly HORT 27) - 1 Unit

Grading: Pass/No Pass Option

## Class Hours: 13.5 lecture/13.5 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) <br> Grading: Pass/No Pass Option

Class Hours: 13.5 lecture/13.5 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: 13.5 lecture/13.5 lab total
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: MATH 100 with a grade of C or higher, or Math Placement Level 3 or higher; and ENGL 190 with a grade of C or higher, 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) <br> Grading: Pass/No Pass Option

Advisory: MATH 100 with a grade of C or higher, or Math Placement Level 3 or higher; and ENGL 190 with a grade of C or higher, 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) <br> Grading: Pass/No Pass Option

Advisory: MATH 100 with a grade of C or higher, or Math Placement Level 3 or higher; and ENGL 190 with a grade of C or higher, 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: MATH 100 with a grade of C or higher, or Math Placement Level 3 or higher; and ENGL 190 with a grade of C or higher, 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 <br> (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) <br> 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.

## AGEH 35 LANDSCAPE DESIGN - 3 Units <br> (formerly HORT 35, AGRI 35) <br> Grading: Pass/No Pass Option

Prerequisite: AGEH 27 and AGEH 28 and AGEH 29 with a grade of C or higher, or AGNR 6 with a grade of C or higher
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 38 LANDSCAPE AND TURF MANAGEMENT - 3 Units (formerly HORT 38, AGRI 38)

Advisory: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher; and MATH 220 with a grade of $C$ or higher, 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) <br> Grading: Pass/No Pass Option

Advisory: AGEH 34 or AGEH 44 with a grade of C 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: 18 lecture/27 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: AGEH 34 or AGEH 44 with a grade of C 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: 18 lecture/54 lab total
Instruction in floristry skills related to contemporary styles of design for all occasions, weddings, 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.

```
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) <br> 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.

## 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: 13.5 lecture/13.5 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- 1 Unit (formerly HORT 46)
Grading: Pass/No Pass Option
Advisory: AGEH 34 with a grade of $C$ or higher
Class Hours: 13.5 lecture/ 13.5 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) - 3 Units (formerly HORT 60) <br> Grading: Pass/No Pass Option

Advisory: ENGL 190 with a grade of C or higher 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 61 PLANT PROTECTION MATERIALS - 3 Units

Grading: Pass/No Pass Option
Class Hours: 162 total hours (Distance Education delivery format only) Course will cover pesticide laws and regulations, risks, benefits and mode of action, safe and responsible use, toxicology, and environmental issues related to the use of all agricultural chemicals. Fertilizers, plant growth regulators, defoliants, antimicrobials and other new generation pesticides will be discussed. Sustainable practices will be emphasized and examples used to generate students ability to solve pest problems and formulate integrated pest/agrichemical management plans. This course may be offered in a distance education format.

## 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 AGEH 72 Organic Gardening Practices (Fall and Spring) Class Hours: 9 lecture/27 lab total
This course is an introduction to Organic Gardening. It includes summer crops, irrigation, pests and cultural practices for growing a summer garden. Students will be planting crops for the season and encouraged to start their own garden plot. Subject matter in this course is supplementary to AGEH 72, which addresses gardening practices for spring and fall seasons.

## AGEH 72 ORGANIC GARDENING PRACTICES (FALL AND SPRING) - 1 Unit (formerly HORT 72)

Grading: Pass/No Pass Option
Note: This course is complimentary to, but independent from AGEH
71 Organic Gardening Practices (Summer)
Class Hours: 9 lecture/27 lab total
Course covers cool season organic vegetable growing practices for the home and market gardener. Includes fall vegetable cover crops and cultivating practices, early spring planting and season extending strategies. Students will be planting crops appropriate for the season. Since subject matter varies with each seasonal crop, this course is supplementary to AGEH 71, which addresses gardening practices for the summer season.

## 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.

## AGEH 120 SELECTED TOPICS IN ENVIRONMENTAL HORTICULTURE: PRUNING - 5 Units (formerly HORT 120, HORT 128E, AGRI 128E) <br> Grading: Pass/No Pass Option <br> 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 (formerly HORT 122, HORT 128R, AGRI 128R) <br> 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)

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.

## AG - EQUINE (AGEQ)

AGEQ 12 HORSEMANSHIP - 3 Units (formerly AGRI 12)
Grading: Pass/No Pass Option
Note: Students must 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.

## AGEQ 21 HORSE MANAGEMENT- 3 Units <br> (formerly AGRI 21, AGRI 115)

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 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 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.

## AG - MECHANIZED AGRICULTURE (AGMA)

## AGMA 42 FARM POWER AND MACHINERY - 3 Units <br> 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 WILDLAND AND RANGE ECOLOGY - 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 education 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 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) <br> \section*{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 will help students develop an understanding of the sampling methods and equipment used to inventory forest resources on Private, State, and Federal lands. Measurements of timber stand growth, quantity and quality, and other natural resources including water, range, and wildlife 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) <br> 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) 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 HEALTH - 3.5 Units (formerly NR 53) <br> Grading: Pass/No Pass Option

Note: Several field trips to various locations will occur as feasible.
Class Hours: 27lecture/108 lab total (when offered in the Distance Education format, hours will total 81 for the lecture portion of the class and an additional 108 hours of lab totaling 189 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. Also, issues related to fuels management and prescribed fire 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 total
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: AGNR 60 or previous completion of 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 education 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 66A WATERSHED RESTORATION PRACTICUM I - <br> 1 Unit (formerly AGNR 66, NR 66) <br> Grading: Pass/No Pass Option

## Class Hours: 9 lecture/27 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 require an interdisciplinary scientific approach and community-wide participation to protect, enhance and restore.

AGNR 66B WATERSHED RESTORATION PRACTICUM II - 1 Unit Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 lab total
Students will determine best management practices for erosion and sediment control. Laws and requirements will be discussed along with the importance and methods for documenting endangered species and archaeological sites.

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.

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: AGNR 173 with a grade of $C$ or higher
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) <br> 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.

## 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 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: ENGL 190 with a grade of $C$ or higher, 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) <br> Grading: Pass/No Pass Option <br> Class Hours: 9 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.

## 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, resources management and 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 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: 13.5 lecture/13.5 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) <br> Grading: Pass/No Pass Option

Class Hours: 13.5 lecture/13.5 lab tota
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 LANGUAGE (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: 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) <br> Grading: Pass/No Pass Option

Corequisite: 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.

## ASL 2 AMERICAN SIGN LANGUAGE 2-4 Units (formerly SL 92, SPED 93B)

Grading: Pass/No Pass Option
Prerequisite: ASL 1 with a grade of $C$ or higher
Corequisite: 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.

[^4]ASL 3 AMERICAN SIGN LANGUAGE 3 - 4 Units (formerly SL 94, SPED 93C)
Grading: Pass/No Pass Option
Prerequisite: ASL 2 with a grade of $C$ or higher
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: ASL 3 with a grade of $C$ or higher
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 4 Units (formerly SL 7) <br> Prerequisite: ASL 4 with a grade of $C$ or higher <br> 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: ENGL 190 with a grade of C or higher or English Placement Level 6 or higher; and BIOL 5 and BIOL 6 with a grade of C 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: ENGL 1A with a grade of C or higher 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: ENGL 1A with a grade of C or higher 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: ENGL 1A with a grade of C or higher 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 adaptive 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: ENGL 280 with a grade of C or higher 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.

[^5]
## ARCHAEOLOGY (ARCH)

## ARCH 3 PRINCIPLES OF ARCHAEOLOGY - 3 Units

 Class Hours: 54 lecture totalAn 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 4A BEGINNING FIELD ARCHAEOLOGY - 3 Units (formerly ARCH 4, 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.

ARCH 4B INTERMEDIATE FIELD ARCHAEOLOGY - 3 Units Grading: Pass/No Pass Option
Prerequisite: ARCH 4A with a grade of C or higher
Class Hours: 18 lecture/108 lab total
An intermediate course in the practical application of archaeological principles and methods that continues to build on the beginning course. Students will begin to take a part in the development and organization of scientific archaeological excavation projects. Students will learn additional excavation techniques, and learn to supervise field crews. Students will learn how to develop strategies for site reconnaissance and recording. Students will evaluate field records, and coordinate field catalogues.

## ARCH 4C ADVANCED INTERMEDIATE FIELD ARCHAEOLOGY 3 Units <br> Grading: Pass/No Pass Option <br> Prerequisite: ARCH 4B with a grade of $C$ or higher <br> Class Hours: 18 lecture/108 lab total

An advanced intermediate course in the practical application of archaeological principles and methods. Students learn advanced excavation techniques. Students learn additional methods of site mapping and recording. Students learn to map using a total station. Students are trained in soil sampling, and flotation techniques.

ARCH 4D ADVANCED FIELD ARCHAEOLOGY - 3 Units
Grading: Pass/No Pass Option
Prerequisite: ARCH 4C with a grade of C or higher
Class Hours: 18 lecture/108 lab total
An advanced course in the practical application of archaeological principles and methods. Students will serve as assistant field director to the principal investigator in a local archaeological project. Students will learn to use archival facilities and evaluate documentary evidence of archaeological sites. Students will organize and execute aspects of field projects. Students will learn to interpret data gathered from field projects.

## ARCH 5A BEGINNING ARCHAEOLOGY LABORATORY - 2 Units (formerly ARCH 5, 5AD)

Class Hours: 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. 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.

## ARCH 5B INTERMEDIATE ARCHAEOLOGY LABORATORY 2 Units <br> Prerequisite: ARCH 5A with a grade of C or higher <br> Class Hours: 108 lab total

An intermediate course in the practical application of archaeological laboratory methods. Students will learn beginning analyses of floral, faunal, and lithic materials collected during excavation of local sites. Students will learn artifact replication and conduct some experiments with artifact replicas.

## ARCH 5C ADV. INTERMEDIATE ARCHAEOLOGY LABORATORY

 - 2 UnitsPrerequisite: ARCH 5B with a grade of C or higher
Class Hours: 108 lab total
An advanced intermediate course in the application of archaeological laboratory methods. Students will formulate and carry out analyses of different archaeological materials using methods learned in earlier courses. Students will clean, catalogue, draw, and analyze artifacts recovered from local archaeological sites. Students will learn mapping applications that can be used to create spatial distribution of artifacts within archaeological sites.

ARCH 5D ADVANCED ARCHAEOLOGY LABORATORY - 2 Units
Prerequisite: ARCH 5C with a grade of $C$ or higher
Class Hours: 108 lab total
An advanced course in the practical application of archaeological laboratory methods. Students will serve as laboratory assistant to the principal investigator in an archaeological field project. Students will complete a series of analyses that conform to professional archaeological standards. Students will oversee all activities in the laboratory including the cleaning, cataloging, drawing, and analysis of artifacts recovered from local archaeological sites.

## 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 UnitsGrading: 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 contemporary visual expression, starting with preImpressionism 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) <br> Grading: Pass/No Pass Option <br> Class Hours: 27 lecture/81 lab total

A fundamental course in two-dimensional design and color theory with the study of basic design elements as they apply to form. Twodimensional 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 (formerly ART 14B)

Grading: Pass/No Pass Option
Prerequisite: ART 12 with a grade of C or higher
Class Hours: 27 lecture/81 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: 27 lecture/81 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 threedimensional art, architecture, landscape, interior and industrial design.

ART 16 PENCIL RENDERING - 2 Units (formerly ART 16AB) Class Hours: 18 lecture/54 lab total
A fundamental course to prepare pictorial presentations 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.

## ART 17 SHADES, SHADOWS, AND PERSPECTIVES - 3 Units (formerly ART 17AD) <br> Grading: Pass/No Pass Option <br> Class Hours: 27 lecture/81 lab total

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 works.

ART 21A BEGINNING FREEHAND DRAWING - 3 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture/81 lab total
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: ART 21A with a grade of C or higher
Class Hours: 27 lecture/81 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- 2 Units (formerly ART 23AB)
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 arts.

## ART 26A BEGINNING WATERCOLOR-3 Units (formerly ART 26, 26AB)

## Grading: Pass/No Pass Option

Class Hours: 27 lecture/81 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.

## ART 26B INTERMEDIATE WATERCOLOR - 3 Units (formerly ART 27, 26CD)

Grading: Pass/No Pass Option
Prerequisite: ART 26A with a grade of C or higher
Class Hours: 27 lecture/81 lab total
An intermediate course in watercolor painting with an emphasis on expansion of watercolor techniques as well as conceptual and technical development. Students will investigate non-traditional materials, explore methods of paint application (including subtractive and stencil methods) and further their artistic understanding and development through the consideration of contemporary trends in watercolor.

ART 26C ADVANCED INTERMEDIATE WATERCOLOR - 3 Units
Grading: Pass/No Pass Option
Prerequisite: ART 26B with a grade of $C$ or higher
Class Hours: 27 lecture/81 lab total
A course designed to expand upon the information and techniques learned in Intermediate Watercolor 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 the quality and number of paintings completed during the semester. The student will also learn to develop a professional portfolio and to communicate professionally.

ART 26D ADVANCED WATERCOLOR - 3 Units
Grading: Pass/No Pass Option
Prerequisite: ART 26C with a grade of C or higher
Class Hours: 27 lecture/81 lab total
An advanced course in Watercolor. Students will explore ink painting, non-brush techniques, watercolor transfer as well as illustration techniques. Students will develop a portfolio which incorporates a variety of compositional schemes in expressive and non-objective imagery.

## ART 29A BEGINNING PAINTING-3 Units (formerly ART 29, 25AB)

Class Hours: 27 lecture/81 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 used in representation and abstract form. Course designed for Architecture majors, Painting Concentration and Theatre Arts Technician Concentration

## ART 29B INTERMEDIATE PAINTING - 3 Units (formerly ART 30, 25CD) <br> Prerequisite: ART 29A with a grade of $C$ or higher <br> Class Hours: 27 lecture/81 lab total

An intermediate course in oil or polymer painting which is designed, through guided experimentation, to broaden the student's knowledge of opaque media and techniques. Students are expected to complete three paintings: a non-objective work, a realist work and a "Free" painting (student's choice).

## ART 29C ADVANCED INTERMEDIATE PAINTING - 3 Units

Prerequisite: ART $29 B$ with a grade of $C$ or higher
Class Hours: 27 lecture/81 lab total
A course designed to expand upon the information and techniques learned in Intermediate painting. 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 communicate professionally.

ART 29D ADVANCED PAINTING - 3 Units
Prerequisite: ART 29C with a grade of $C$ or higher
Class Hours: 27 lecture/81 lab total
Advanced students will narrow the scope of techniques addressed in Art 29C to focus on the creation of a series of images which effectively express selected experiences. Artists will create a portfolio for use in the Annual Student Art Competition. These directed works will result from ongoing class discussions of projects, instructor presented slide lectures, films and technical critiques. Students will investigate preservation and cataloguing techniques.

## ART 31A BEGINNING FIGURE DRAWING - 3 Units (formerly ART 31, 22AB)

Class Hours: 27 lecture/81 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.

## ART 31B INTERMEDIATE FIGURE DRAWING - 3 Units (formerly ART 32, 22CD)

Prerequisite: A grade of C or higher in ART 31A
Class Hours: 27 lecture/81 lab total
An intermediate visual arts course in the study of the nude human figure. Through the use of a variety of media, students will expand their skills in drawing from observation as well as interpret the figure through a variety of approaches.

## ART 31C ADVANCED INTERMEDIATE FIGURE DRAWING 3 Units

Prerequisite: ART 31B with a grade of C or higher
Class Hours: 27 lecture/81 lab total
A developmental course designed to expand on information and techniques learned in Intermediate Figure Drawing. Attention will be given to a more personal interpretation of the figure, technique, consistency, presentation and the execution and resolution of ideas with greater independence. The student will produce and critically discuss increasingly sophisticated works, which will become part of his/ her professional portfolio.

ART 31D ADVANCED FIGURE DRAWING - 3 Units
Prerequisite: ART 31C with a grade of $C$ or higher
Class Hours: 27 lecture/81 lab total
Advanced Figure Drawing students will work toward an expanded knowledge of (and ability) with materials employed in Advanced Intermediate Figure Drawing. Through this exploration, students will define a clearer personal direction and emerge with enhanced critical skills.

ART 35A BEGINNING CERAMICS - 3 Units (formerly ART 35, 35AB)
Grading: Pass/No Pass Option
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
An introductory course developing skills in hand-building with coils, slabs and introduction of the potter's wheel. The course includes glazing, decorative techniques, properties of clay and firing of ceramic forms.

## ART 35B INTERMEDIATE CERAMICS - 3 Units (formerly ART 36, 35CD) <br> Grading: Pass/No Pass Option

Prerequisite: ART 35A with a grade of C or higher
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
An intermediate course developing skills in the use of the potter's wheel. The course includes hand-building, throwing, plaster molding, glazing, surface decoration and firing of ceramic forms.

## ART 37 SCULPTURAL CERAMICS - 3 Units

Grading: Pass/No Pass Option
Advisory: ART 35A or ART 35B with a grade of C or higher
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
This is a ceramics course emphasizing studio problems which involve the potter's wheel, construction of molds and hand-building techniques. Use of the potter's wheel will go beyond basic functional forms and will be used to create sculpture. Molds and hand-building techniques will also emphasize sculptural works in clay.

## 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.

ART 46 GLASS BLOWING - 3 Units (formerly ART 45CD)
Grading: Pass/No Pass Option
Prerequisite: ART 45 or ART 57 with a grade of $C$ or higher
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.

## ART 50A BEGINNING PRINTMAKING - 3 Units <br> (formerly ART 50, 50AD)

Grading: Pass/No Pass Option
Class Hours: 27 lecture/81 lab total
An introductory course surveying the four main printmaking processes as they apply to the visual arts. Studio experience during the semester will focus on black and white printing techniques Including: relief, intaglio, stencil (serigraph) and planographic (monotype or lithography). Emphasis will be placed on the use of printmaking processes as an expressive art form through lecture, demonstration, and class critiques.

## ART 50B INTERMEDIATE PRINTMAKING - 3 Units

Grading: Pass/No Pass Option
Prerequisite: ART 50A with a grade of C or higher
Class Hours: 27 lecture/81 lab total
An intermediate course focusing on color intaglio techniques including: multi-plate and a la poup'ee processes. Emphasis will be placed on the use of printmaking processes as an expressive art form through lecture, demonstration and class critiques. Students will produce four editions of prints within the color intaglio techniques.

## ART 50C ADVANCED PRINTMAKING - 3 Units

Grading: Pass/No Pass Option
Prerequisite: ART 50B with a grade of C or higher
Class Hours: 27 lecture/81 lab total
An advanced course focusing on color relief print processes (i.e. multiplate, a la poup'ee and rainbow printing). Advanced students will clearly express their personal aesthetic through the production of four editions of prints within the color relief processes. Emphasis will be placed on the use of color relief printing as an expressive art form through lecture, demonstration, and class critiques.

## ART 55A BEGINNING SCULPTURE - 3 Units (formerly ART 55, 55AB)

Advisory: ART 15 with a grade of C or higher
Note; Field trips may be required
Class Hours: 27 lecture/81 lab total
A creative course in the sculpting of wood, clay, plaster, and other materials. Application of these media are used in abstract and representational forms.

## ART 55B INTERMEDIATE SCULPTURE - 3 Units (formerly ART 56, 55CD)

Prerequisite: ART 55A with a grade of C or higher
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
An intermediate level course in the sculpting of clay, wood, metal, plaster, and other materials. Creative application of these media are used in abstract and representational forms.

## ART 55C ADVANCED SCULPTURE - 3 Units

Prerequisite: ART 55B with a grade of $C$ or higher
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
This course expands upon the information and techniques gained from ART 55B. Attention will be given to personal idea development and concepts, consistency, presentation, techniques and working independently. Students will be expected to develop a style and conceptual approach which will be reflected in the sculpture produced during the semester. Students will develop a professional portfolio and learn to communicate professionally.

## ART 57 SCULPTURAL GLASS - 3 Units

Advisory: ART 45 or ART 55 with a grade of $C$ or higher
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 BEGINNING DARKROOM PHOTOGRAPHY - 3 Units (formerly ART 60AB)

Grading: Pass/No Pass Option
Note: This is a film based class; students must provide their own 35 mm 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 60B INTERMEDIATE DARKROOM PHOTOGRAPHY - 3 Units

 (formerly ART 61, 61A)Grading: Pass/No Pass Option
Prerequisite: ART 60A with a grade of C or higher
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
This course builds on the techniques covered in ART 60A. This course provides an introduction to the fundamental theories, vocabularies and techniques of traditional chemical-based photography. Emphasis will be on negative quality, the fine print and presentation.

## ART 60C ADV ANCED INTERMEDIATE DARKROOM

PHOTOGRAPHY - 3 Units (formerly ART 62, 61BD)
Grading: Pass/No Pass Option
Prerequisite: ART 60B with a grade of C or higher
Note: This is a film based class; students must provide their own 35 mm camera with adjustable shutter and aperture.
Class Hours: 27 lecture/81 lab total
This course builds on the techniques covered in ART 60B. This course provides instruction in the advanced concepts of traditional chemicalbased photography. Emphasis will be on alternative process photography, medium and large format photography and photo theory.

## ART 60D ADVANCED DARKROOM PHOTOGRAPHY - 3 Units

Grading: Pass/No Pass Option
Prerequisite: ART 60C with a grade of C or higher
Note: This is a film based class; students must provide their own 35 mm camera with adjustable shutter and aperture.
Class Hours: 27 lecture/81 lab total
This course builds on the techniques covered in ART 60C. This course provides continued exploration in the advanced theories, vocabularies and techniques of traditional chemical-based photography. Emphasis will be on current issues in photography, contemporary photographers and portfolio development along with the basic theories of illumination and the utilization of a variety of light sources.

## ART 70A BEGINNING DIGITAL PHOTOGRAPHY - 3 Units (formerly ART 70)

Grading: Pass/No Pass Option
Note: This is a digital imaging class. Students must provide an 8 megapixel (or larger) digital camera with manual aperture and shutter speed controls.
Class Hours: 27 lecture/81 lab total
An introductory digital course presenting the origins and history of photography, camera and lens familiarization, exposure, metering, printing procedures, print presentation, composition and standards of quality. Emphasis is placed on print quality along with content, composition and personal expression. The course concentrates on expressive and aesthetic aspects of photography in fine art.

## ART 70B INTERMEDIATE DIGITAL PHOTOGRAPHY - 3 Units (formerly ART 71) <br> Grading: Pass/No Pass Option

Advisory: ART 70A with a grade of C or higher
Note: This is a digital imaging class. Students must provide an 8 megapixel (or larger) digital camera with manual aperture and shutter speed controls.
Class Hours: 27 lecture/81 lab total
A continuation and advancing of the principles covered in Art 70A with emphasis on artistic expression and use of current technologies.

## ART 70C ADVANCED INTERMEDIATE DIGITAL PHOTOGRAPHY 3 Units

Grading: Pass/No Pass Option
Prerequisite: ART 70B with a grade of C or higher
Note: This is a digital imaging class. Students must provide an 8 megapixel (or larger) digital camera with manual aperture and shutter speed controls.
Class Hours: 27 lecture/81 lab total
This course builds on the techniques covered in ART 70B. This course provides instruction in the advanced theories, vocabularies and techniques of digital photography with emphasis on artistic expression and use of current technologies.

## ART 70D ADVANCED DIGITAL PHOTOGRAPHY - 3 Units

Grading: Pass/No Pass Option
Prerequisite: ART 70C with a grade of C or higher
Note: This is a digital imaging class. Students must provide an 8 megapixel (or larger) digital camera with manual aperture and shutter speed controls.
Class Hours: 27 lecture/81 lab total
This course builds on the techniques covered in ART 70C. This course provides continued exploration in the advanced theories, vocabularies and techniques of digital photography. Emphasis will be on current issues in photography, contemporary photographers and portfolio development along with the basic theories of illumination and the utilization of a variety of light sources.

ART 80A GRAPHIC DESIGN - 3 Units
Grading: Pass/No Pass Option
Advisory: ART 12 with a grade of C or higher
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: ART 80A with a grade of C or higher
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.

THE 100 SERIES OF COURSES ARE SPECIFIC SUBJECT AREAS TAKEN FROM THE TRANSFER (1-98) COURSES AS SHORTTERM 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 twodimensional works. Underlying the instruction is a historical component which emphasizes modern and contemporary art to broaden the students' interest and awareness of contemporary trends.

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.

ART 122 PORTRAIT PAINTING - 2 Units (formerly ART 125W) Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
A basic course in the materials, tools, composition, proportion, lighting, shadow patterns, anatomy, value, color, line and study of other masters in portrait painting.

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.

## ART 124 INTRODUCTION TO PAINTING - 2 Units (formerly ART 125Y) <br> 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.

## 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.

## 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.

## ART 301 BEGINNING, INTERMEDIATE AND ADVANCED DRAWING \& PAINTING-MIXED MEDIA - 0 Units <br> 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
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, the sun, planets and their moons, and generalities of stellar evolution. This course may be offered in a distance education 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 1 VEHICLE ELECTRICAL SYSTEMS - 3 Units

Class Hours: 27 lecture/81 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: AUTO 1 with a grade of C or higher
Class Hours: 27 lecture/81 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. This course, along with AUTO 20 and AUTO 21 will qualify students to test for the Bureau of Automotive Repair Level 1 smog training certificate.

## 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. This course along with AUTO 10 and AUTO 21 will qualify students to test for the Bureau of Automotive Repair for Level 1 smog training certificate.

## AUTO 21 ADVANCED ENGINE PERFORMANCE - 3 Units

Prerequisite: AUTO 20 with a grade of $C$ or higher
Class Hours: 27 lecture/81 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. This course along with AUTO 10 and AUTO 20 will qualify students to test for the Bureau of Automotive Repair Level 1 smog training certificate.

## 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.

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: AUTO 130 with a grade of C or higher
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: 27 lecture/81 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 150 INTRODUCTION TO ENGINE MACHINING - 5 Units (formerly INDE 150)

Class Hours: 72 lecture/54 lab
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. This course will also 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 based tasks will utilize hand and power tools and modern machining equipment. Completion of this course will prepare students to become certified in ASE area A-1.

## AUTO 161 MANUAL DRIVE TRAIN AND AXLES - 3 Units <br> Class Hours: 27 lecture/81 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

## 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 176 LEVEL 2 SMOG TECHNICIAN TRAINING - 1 Unit
Prerequisite: AUTO 10, AUTO 20 and AUTO 21 with a grade of $C$ or higher
Class Hours: 9 lecture/27 lab total
The Smog Check training is intended to provide students the knowledge, skills, and abilities needed to perform Smog Check inspections. Students who successfully complete this training will have met the Bureau's training requirements to qualify to take the Smog Check Inspector state licensing examination.

## AUTO 180 ENGINE MACHINIST I-4 Units <br> (formerly INDE 180, AUTO 180A)

Prerequisite: AUTO 150 and AUTO 152 with a grade of $C$ or higher, or DIES 164 with a grade of C or higher
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.

## AUTO 181 ENGINE MACHINIST II - 4 Units <br> (formerly AUTO 181, AUTO 180B)

Prerequisite: AUTO 180 with a grade of C or higher
Note: Basic hand tools required
Class Hours: 36 lecture/108 lab total
This course will build on the skills obtained in AUTO 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.

## BIOLOGICAL SCIENCES (BIOL)

BIOL 1 PRINCIPLES OF BIOLOGY - 4 Units
Prerequisite: CHEM 1A with a grade of C or higher
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 (when offered in the Distance Education format, hours will total 162)
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. This course may be offered in a distance education format.

## BIOL 6 INTRO. TO HUMAN BIOLOGY LABORATORY - 1 Unit

 Corequisite: BIOL 5 or previous completion of 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 - 3 Units
Grading: Pass/No Pass Option
Note: BIOL 10 will meet the general education requirement for a laboratory science if taken with BIOL 10L.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introduction to the major concept of modern biology. Topics covered include biochemistry, 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 course may be offered in a distance education format. This course will meet the general education requirement for a laboratory science if taken with BIOL 10L.

BIOL 10L GENERAL BIOLOGY LABORATORY - 1 Unit Grading: Pass/No Pass Option
Corequisite: BIOL 10 or previous completion of BIOL 10 with a grade of C or higher.
Note: BIOL 10L will meet the general education requirement for a laboratory science if taken with BIOL 10.
Class Hours: 54 lab total
Laboratory experiments and demonstrations covering the basic concepts of the lecture course BIOL 10. The laboratory is designed to expose student to biological techniques including microscopy, biochemistry, genetics, evolution, diversity of life, and principles of ecology.

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.

## BOTANY (BOT)

BOT 1 GENERAL BOTANY - 4 Units
Prerequisite: MATH 102 with a grade of C or higher 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: 9 lecture /27 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, OAS

## BUAD 6 BUSINESS LAW I-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 II - 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: ENGL 280 with a grade of C or higher 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: BUAD 10 with a grade of C or higher, and ENGL 280 with a grade of $C$ or higher 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 nature, dimensions, and environment of international business. Emphasis on business functions, practices,
and decisions as influenced by cultural, political, economic, social, legal, technology, and institutional factors while working in foreign markets and trade. This course may be offered in a distance education format. (Online catalog revised 6/9/2014)

## 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 30 REAL ESTATE PRINCIPLES - 3 Units (formerly REAL 30)

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
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. This course may be offered in a distance education format.

## 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.

[^6]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 66 BUSINESS COMMUNICATIONS - 3 Units

Prerequisite: BUAD 166 with a grade of C or higher or English Placement Level 6 or higher
Note: Student must complete all assignments using a computer. Handwritten assignments will not be accepted.
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, an analytical report, 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 e-commerce 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 76 SALES- 3 Units (formerly MKTG 70, BUSI 70)
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 (formerly MKTG 74, BUSI 74) <br> 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.

[^7]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 OnlyClass 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 OnlyClass 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 <br> Grading: Pass/No Pass Only <br> Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27) <br> 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\mathrm{ 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.

## BUAD 106 BUSINESS MATHEMATICS - 3 Units

Grading: Pass/No Pass Option
Prerequisite: MATH 240 with a grade of C or higher 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: ENGL 280 with a grade of C or higher 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.

## BUAD 176 PRINCIPLES OF RETAILING - 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: CHEM 16 or CHEM 2A with a grade of C or higher, or a score of 20 or higher on the California Chemistry Diagnostic test; and MATH 102 with a grade of C or higher, 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 (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 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. The lecture and discussion portions of this course may be offered in a distance education format.

CHEM 1B GENERAL CHEMISTRY - 5 Units
Grading: Pass/No Pass Option
Prerequisite: CHEM 1A with a grade of $C$ 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, 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)
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. This course may be offered in a distance education format.

CHEM 2A INTRODUCTION TO CHEMISTRY - 5 Units
Prerequisite: MATH 101 with a grade of C or higher 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, 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)
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 education format.

## CHEM 2B INTRO. TO ORGANIC AND BIOCHEMISTRY - 5 Units

Grading: Pass/No Pass Option
Prerequisite: CHEM 2A or CHEM 1A with a grade of C 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/ 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

Prerequisite: MATH 101 with a grade of C or higher, 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: 36 lecture/108 lab total
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
Advisory: MATH 101 with a grade of C or higher or Math Placement Level 3 or higher
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)
An introduction to the major concepts of chemistry involving minimal student friendly math with attention to their relevance to practical and societal problems. This course is intended for non-science 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 (not in the online format). This course may be offered in a distance education format. This course will meet the general education requirement for a laboratory science if it is taken with CHEM 11.

[^8]CHEM 16 CHEMICAL PROBLEM-SOLVING - 3 Units
Grading: Pass/No Pass Option
Advisory: MATH 101 with a grade of C or higher 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 Units

Class 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 non-science 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: CHEM 1B with a grade of C or higher
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: CHEM 1B with a grade of C or higher
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: CHEM 70 with a grade of C or higher
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 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: CHEM 70A with a grade of C or higher
Corequisite: CHEM 71 or previous completion of 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.

## 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.

## CIVIC AND COMMUNITY ENGAGEMENT (CCE)

## CCE 1A INTRODUCTION TO CIVIC AND COMMUNITY ENGAGEMENT - 1 Unit

Grading: Pass/No Pass Option
Advisory: ENGL 190 with a grade of C or higher, or ESL 138 with a grade of C or higher
Class Hours: 18 lecture total
This course prepares students to design and lead service learning experiences. Students explore experiential education, theories of service and service learning, strategies for facilitation and effective teaching practice. The course integrates a practical experience in leading service learning projects through community or classroom placements. The course allows students to balance action with critical reflection on service learning practice.

COMMUNICATION STUDIES (CMST)
CMST 10 INTERPERSONAL COMMUNICATION - 3 Units (formerly SPCH 10/10A)
Grading: Pass/No Pass Option
Advisory: ENGL 190 with a grade of C or higher, 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 an introduction to the process of human communication with emphasis on interpersonal communication. Emphasis is placed on the psychological, social, cultural and linguistic factors that affect normal person-to-person interactions. Subjects covered are the understanding of ethical interpersonal communication based in communication theory and research, listening, verbal and nonverbal communication, self-awareness/self-concept, perception, emotions, relationships, communication climates, and conflict management. Students will increase their knowledge and skills in interpersonal communication. College level writing skills will be expected on all papers, outlines and short essays. This course may be offered in a distance education format.

## CMST 20 INTERCULTURAL COMMUNICATION - 3 Units (formerly SPCH 20)

Grading: Pass/No Pass Option
Advisory: ENGL 190 with a grade of C or higher, 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: ENGL 190 with a grade of C or higher, 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 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) <br> Grading: Pass/No Pass Option

Advisory: ENGL 190 with a grade of C or higher, 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) <br> Grading: Pass/No Pass Option

Advisory: ENGL 190 with a grade of C or higher, 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/problemsolving, 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: ENGL 190 with a grade of C or higher, 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 97I91AD) <br> Grading: Pass/No Pass Option <br> 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 <br> 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 <br> 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.

## 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 (formerly 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 20 ACCESS FOR WINDOWS - I - 1 Unit (formerly MIS 53)

 Grading: Pass/No Pass OnlyAdvisory: 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 Learning Resource 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: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
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: CIS 20 or CIS 23 with a grade of C or higher 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 Learning Resource 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: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
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 23 FUNDAMENTALS OF SQL - 3 Units
Advisory: CIS 1 with a grade of $C$ or higher
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 using Structured Query Language. Topics include normalization, design methodology, database administration, SQL commands, SQL functions and procedures. 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 using SQL. The MySQL and the Microsoft Access versions of SQL are utilized in the class exercises and projects. 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)

 Advisory: CIS 2 with a grade of C or higherClass 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: CIS 31 with a grade of C or higher
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) <br> Prerequisite: CIS 32 with a grade of C or higher

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: CIS 33 with a grade of C or higher
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 39 CISCO NETWORKING - CCNA SECURITY - 3 Units

Advisory: CIS 34 with a grade of C or higher 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 8 - CONFIGURATION - 1 Unit
Class Hours: 9 lecture/27 lab total
A Microsoft Certified Solutions Associate course. The terminology, planning, installation, configuration, administration, and troubleshooting of the Windows 8 operating system will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-687 and for employment in the IT field. Students who enrolled in version Windows 7 or earlier will be able to enroll in Windows 8.

CIS 51 MANAGING AND MAINTAINING WINDOWS 8-1 Unit Class Hours: 9 lecture/27 lab total
This is a Microsoft Certified IT Professional course with emphasis on managing and maintaining a Windows 8 client system. The terminology, planning, installation, configuration, administration, and troubleshooting of applications in the Windows 8 environment will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-688 and for employment in the IT field. Students who enrolled in version Windows 7 or earlier will be able to enroll in Windows 8.

## CIS 52 INSTALL AND CONFIGURE SERVER 2012-1 Unit Class Hours: 9 lecture/27 lab total

A Microsoft Certified IT Professional course with emphasis on installing and configuring Windows Server 2012. The terminology, planning, installation, configuration, administration, and troubleshooting a Windows Server 2012 environment will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-410 and for employment in the IT field. Students who took CIS 52 with an earlier Server version will be able to enroll in Windows Server 2012.

## CIS 53 ADMINISTERING SERVER 2012-1 Unit <br> Class Hours: 9 lecture/27 lab total

A Microsoft Certified IT Professional course with emphasis on the administration of Windows Server 2012 network infrastructure. The terminology, planning, installation, configuration, administration, and troubleshooting a Windows Server 2012 network infrastructure will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-411 and for employment in the IT field. Note: Students who took CIS 53 with an earlier Server version will be able to enroll in Windows Server 2012.

## CIS 54 CONFIGURE ADVANCED SERVER 2012 SERVICES 1 Unit

Class Hours: 9 lecture/27 lab total
A Microsoft Certified IT Professional course with emphasis on installing and configuring Windows Server 2012 services. The terminology, planning, installation, configuration, administration, and troubleshooting a Windows Server 2012 environment will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-412 and for employment in the IT field. Note: Students who took CIS 54 with an earlier Server version will be able to enroll in Windows Server 2012.

CIS 55 EXCHANGE SERVER 2010, CONFIGURATION - 1 Unit Class Hours: 9 lecture/27 lab total
A Microsoft Certified IT Professional course with emphasis on installing and configuring Microsoft Exchange Server 2010. The terminology, planning, installation, configuration, administration, and troubleshooting an Exchange Server 2010 environment will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-622 and for employment in the IT field. Note: Students who took CIS 55 with an earlier Server version will be able to enroll in Windows Server 2010.

CIS 57

## INTRODUCTION TO COMPUTERS THROUGH GAMING

 - 3 UnitsClass 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: CIS 2 with a grade of C or higher
Class Hours: 36 lecture/54 lab total
This course is intended to teach programming techniques using the Visual Basic language. Software life-cycle including design, development, styles, documentation, testing, and maintenance; procedural versus object oriented programming; and program design tools will be discussed. Students will be introduced to Visual Basic statements including, but not limited to data types, input, output, computation, looping, arrays, subroutines, file processing commands, form layout, objects, events, error handling, passing parameters by value and by reference, principles of testing and designing test data, 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 BUSI 25, MIS 25)

Advisory: CIS 2 with a grade of C or higher
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 iteration structures, functions, arrays, pointers, graphics, objects and classes.

CIS 62 JAVA PROGRAMMING - 3 Units (formerly MIS 17)
Advisory: CIS 2 with a grade of C or higher
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: CIS 2 with a grade of C or higher

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<br>Grading: Pass/No Pass Option<br>Advisory: CIS 2 with a grade of C or higher<br>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 65 PROGRAMMING CONCEPTS AND METHODOLOGY USING C++ II - 3 Units

Grading: Pass/No Pass Option
Advisory: CIS 61 with a grade of C or higher
Class Hours: 36 lecture/54 lab total
A study in the C++ programming language. An emphasis is placed on application of software engineering techniques to the design and development of large programs; data abstraction and structures and associated algorithms.

CIS 72 FUNDAMENTALS OF LINUX - 3 Units
Advisory: CIS 2 and CIS 90 with a grade of C or higher
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
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 76 MOBILE APPLICATIONS DEVELOPMENT - 2 Units

Advisory: CIS 2 and CIS 61 with a grade of C or higher
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, tablets and other mobile devices such as the iPhone, the Blackberry, android and more. The course will prepare students to design, program and submit their applications for use on mobile devices. This course may be offered in a distance education format.

## CIS 83 WEB DESIGN USING DREAMWEAVER - 2 Units

Grading: Pass/No Pass Option
Advisory: Basic knowledge of word processing and Windows Class Hours: 27 lecture/27 lab total
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 <br> Advisory: CIS 2 with a grade of C or higher

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 UnitsAdvisory: CIS 31 with a grade of C or higher
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 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.

## 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) <br> 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 onand 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 OptionPrerequisite: CONS 46 and CONS 48 with a grade of $C$ or higher
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 moving soil to grade using cut and fill calculations. This class will also introduce the student to the Topcon 3D-MC2 GNSS (Global Navigation Satellite System).

## CONS 48 SURVEYING FOR EQUIPMENT OPERATORS - 2 Units (formerly AGRI 48)

Grading: Pass/No Pass Option
Advisory: MATH 100 with a grade of $C$ or higher
Class Hours: 18 lecture/54 lab total
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-the-art 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

Grading: Pass/No Pass Option
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 55A EQUIPMENT OPERATIONS SKILLS DEVELOPMENT 1 Unit (form. AGRI 56EH/AGRI 55/ENVR 55/CONS 55) <br> Grading: Pass/No Pass Option <br> Prerequisite: CONS 46 with a grade of C or higher

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 as it applies to excavations. Includes farm and industrial equipment such as wheel and crawler tractors, backhoes, and excavators. Service and adjustment will also be a part of this course.

## CONS 55B EQUIPMENT OPERATIONS PAD CONSTRUCTION 1 Unit <br> Grading: Pass/No Pass Option

Prerequisite: CONS 46 with a grade of C or higher
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 as it applies to building pads. Includes farm and construction equipment such as bulldozers, loaders, dump trucks and motor grader. Hands-on training is emphasized in lab.

## CONS 55C EQUIPMENT OPERATIONS ROADWAY CONSTRUCTION - 1 Unit

Grading: Pass/No Pass Option
Prerequisite: CONS 46 with a grade of C or higher
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 as it applies to constructing roads and driveways. Includes farm and construction equipment such as water truck, crawler tractors, motor grader, compactor and scraper. Hands-on training is emphasized in the outdoor field lab.

## CONS 55D EQUIPMENT OPERATIONS GLOBAL SATELLITE SYSTEM SKILLS - 1 Unit

Grading: Pass/No Pass Option
Prerequisite: CONS 46 with a grade of C or higher
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
This course focuses on the practical application of skills needed to be successful in equipment operation. Includes training and operating heavy equipment equipped with a Global Satellite Surveying System. This class emphasizes hands-on training with the Topcon 3D-MC ${ }^{2}$ GNSS machine control.

## CONS 56 ESSENTIALS OF CONSTRUCTION - 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 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.

## 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 - 3 Units (formerly ENVR 149, AGRI 149)

Grading: Pass/No Pass Option
Prerequisite: CONS 46 with a grade of $C$ or higher
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: 27 lecture/81 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, preoperation 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 <br> (formerly CONS 151/152, 151A/151B) <br> 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 <br> 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 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.

## CULINARY ARTS (CULA)

The following courses will require extensive reading and math exercises.

## CULA 45 BASIC FOOD PRODUCTION - 5 Units

Corequisite: CULA 50 or previous completion of 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: CULA 45 and CULA 50 with a grade of C or higher 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: CULA 45 and CULA 50 with a grade of $C$ or higher 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 (when offered in the Distance Education format, hours will total 108)
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. This course may be offered in a distance education format.

CULA 50 SANITATION \& SAFETY (formerly CULA 150) - 2 Units Advisory: ENGL 280 with a grade of C or higher, 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: ENGL 280 with a grade of C or higher, 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 discusses 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: CULA 45 and CULA 50 with a grade of $C$ or higher
Advisory: ENGL 280 with a grade of C or higher 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 (when offered in the Distance Education format, hours will total 162)
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. This course may be offered in a distance education format.

## 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 WINE MAKING I-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: CULA 50 and CULA 172 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, 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 timerestricted quality-minded setting. This course is for students pursuing a career in culinary arts/culinary management.

## CULA 76 WINE MAKING II - 2 Units

Grading: Pass/No Pass Option
Prerequisite: CULA 74 with a grade of $C$ or higher
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: CULA 73 or CULA 66 with a grade of C or higher
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 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: CULA 73 with a grade of C or higher
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.

CULA 97 SPECIAL 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.

## CULA 98 SPECIAL LAB TOPICS IN CULINARY ARTS - .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 culinary arts. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes

## CULA 159 STOCKS, SOUPS, SAUCES \& BASIC CULINARY PREPARATION - 2 Units

Corequisite: CULA 50 or previous completion of 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 PRESENTATION OF GARNISHED FOODS) - 2 Units

Corequisite: CULA 50 or previous completion of 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: CULA 50 or previous completion of 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 qualityminded setting. This course is for students pursuing a career in culinary arts/culinary management.

## DANCE (DAN)

## DAN 10 DANCE COMBINATIONS - 1 Unit <br> Grading: Pass/No Pass Option <br> Class Hours: 54 lab total

Introduction to the fundamental movement, technique, terminology, choreography, and philosophy of jazz, ballet, and modern dance.

DAN 15 FUNDAMENTALS OF CHOREOGRAPHY - 1 Unit
Grading: Pass/No Pass Option
Advisory: Previous dance experience or concurrent enrollment in dance classes
Class Hours: 54 lab total
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.

DAN 16 INTERMEDIATE CHOREOGRAPHY - 1 Unit
Grading: Pass/No Pass Option
Advisory: DAN 15 with a grade of C or higher or previous dance experience
Class Hours: 54 lab total
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.

DAN 17 ADVANCED CHOREOGRAPHY AND DANCE ANALYSIS - 1 Unit

Grading: Pass/No Pass Option
Advisory: DAN 16 with a grade of C or higher
Class Hours: 54 lab total
This course is an advanced class in choreography. Students will have the opportunity to apply the knowledge and skills they have acquired through the technique and choreography classes to create a project that is complete for presentation. As part of the choreographic training, the student will have the option to collaborate with students from other artistic disciplines, sometimes using digital tools to blend dance with video and sound, design their own lighting and prepare a piece for public performance

## DAN 20A BEGINNING MODERN DANCE - 1 Unit (formerly DAN 20, PE 40, HPE 36AB) <br> Grading: Pass/No Pass Option <br> Class Hours: 54 lab total

Fundamental movement, techniques, terminology, basic rhythm, and simple choreography of modern dance.

```
DAN 20B INTERMEDIATE MODERN DANCE - }1\mathrm{ Unit
    (formerly DAN 21, PE 43, HPE 47AD, HPE 36CD)
Grading: Pass/No Pass Option
Advisory: DAN 20A with a grade of C or higher
Class Hours: 54 lab total
```

Movement, techniques, terminology, basic rhythm, and choreography of modern dance at an intermediate level.

DAN 20C ADVANCED INTERMEDIATE MODERN DANCE - 1 Unit Grading: Pass/No Pass Option
Advisory: DAN 20B with a grade of $C$ or higher
Class Hours: 54 lab total
A class for modern dance students interested in more technical and sophisticated performing and choreography.

DAN 20D ADVANCED MODERN DANCE - 1 Unit
Grading: Pass/No Pass Option
Advisory: DAN 20C with a grade of C or higher
Class Hours: 54 lab total
A class for modern dance students interested in advanced choreography and performance experience.

DAN 30A BEGINNING BALLET - 1 Unit
(formerly DAN 30, PE 41, HPE 37AB)
Grading: Pass/No Pass Option
Class Hours: 54 lab total
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.

## DAN 30B INTERMEDIATE BALLET - 1 Unit

 (formerly DAN 31, PE 44, HPE 45AD, HPE 37CD)Grading: Pass/No Pass Option
Advisory: DAN 30A with a grade of C or higher
Class Hours: 54 lab total
This is an intermediate level course of classical concert dance and includes intermediate level techniques, recognition of differences in classroom labels between different schools of ballet, developing ability in coordination of steps, musical rhythms and recognition of ballet steps, combinations and patterns.

## DAN 30C ADVANCED INTERMEDIATE BALLET - 1 Unit

 (formerly DAN 31, PE 44, HPE 45AD, HPE 37CD)Grading: Pass/No Pass Option
Advisory: DAN 30B with a grade of C or higher
Class Hours: 54 lab total
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.

## DAN 30D ADVANCED BALLET, POINTE AND PARTNERING 1 Unit (formerly DAN 32) <br> Grading: Pass/No Pass Option

Advisory: DAN 30 C with a grade of C or higher
Class Hours: 54 lab total
This is an advanced 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. Students will be taught original variations from past masters as well as contemporary work of choreographers working today. Performance opportunities are available each semester.

## DAN 40A BEGINNING JAZZ DANCE - 1 Unit (formerly DAN 40, PE 42 and HPE 72AB)

Grading: Pass/No Pass Option
Class Hours: 54 lab total
Fundamental movement, techniques, terminology, basic rhythm, and simple choreography of jazz dance.

DAN 40B INTERMEDIATE JAZZ DANCE - 1 Unit (formerly DAN 41, PE 45, HPE 72CD, HPE 46AD)
Grading: Pass/No Pass Option
Advisory: DAN 40A with a grade of $C$ or higher
Class Hours: 54 lab total
Movement, techniques, terminology, rhythm, and choreography of jazz dance at an intermediate level.

## DAN 40C ADVANCED INTERMEDIATE JAZZ DANCE - 1 Unit

Grading: Pass/No Pass Option
Advisory: DAN 40B with a grade of $C$ or higher
Class Hours: 54 lab total
A class for jazz dance students interested in a more technical and sophisticated performing and choreography.

DAN 40D ADVANCED JAZZ DANCE - 1 Unit
Grading: Pass/No Pass Option
Advisory: DAN 40 C with a grade of C or higher
Class Hours: 54 lab total
A class for jazz dance students interested in advanced technical and sophisticated performing and choreography.

DAN 50A BEGINNING TAP DANCE - 1 Unit (formerly PE 50, 46) Grading: Pass/No Pass Option
Class Hours: 54 lab total
This class will introduce beginning sounds of tap. It will build technique, both physical and mental of this classic art form.

## 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: DNTL 10, DNTL 11, DNTL 12, and DNTL 14 with a grade of $C$ or higherClass 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: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14 with a grade of C or higher
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: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14 with a grade of C or higher
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: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14 with a grade of C or higher
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: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14 with a grade of C or higher
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: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14 with a grade of C or higher
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: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26 with a grade of $C$ or higher
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: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26 with a grade of $C$ or higher
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: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26 with a grade of $C$ or higher
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: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26 with a grade of $C$ or higher
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: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26 with a grade of C or higher
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: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26 with a grade of $C$ or higher
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: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35 with a grade of $C$ or higher
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: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34, and DNTL 35 with a grade of $C$ or higher
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: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34, and DNTL 35 with a grade of $C$ or higher
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: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35 with a grade of $C$ or higher
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: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35 with a grade of $C$ or higher
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: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35 with a grade of $C$ or higher
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: DNTL 14, DNTL 20, DNTL 24, DNTL 30, DNTL 34, DNTL 43 with a grade of C or higher
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 48 HYDRAULICS - 3.5 Units
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 ADVANCED HYDRAULICS (formerly AGRI 49) - 3 Units
Grading: Pass/No Pass Option
Prerequisite: DIES 48 with a grade of C or higher
Class Hours: 27 lecture/81 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.

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: DIES 162 with a grade of C or higher
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 <br> 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: DIES 164 with a grade of C or higher 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.

## DIETARY SERVICES SUPERVISOR (DSS)

DSS 10 FOOD PRODUCTION MANAGEMENT - 3 Units
Grading: Pass/No Pass Option
Advisory: CULA 50 with a grade of C or higher
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

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: DSS 63 and CULA 50 with a grade of C or higher
Corequisite: DSS 10 and FSS 27 or previous completion of 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, with consideration of historical and socio-cultural factors, 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: ECE 7 with a grade of C or higher
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 1 Unit (formerly ECE 153)

Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
This course provides an introduction to family childcare. Topics presented include an overview of regulations, family childcare management, importance of culturally diverse and age appropriate activities, and safe and healthful setting in a family childcare. This course may be offered in a distance education format.

## ECE 7 EARLY CHILDHOOD OBSERVATION \& ASSESSMENT 3 Units

Prerequisite: ECE 1 or ECE 9 with a grade of C or higher
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)

Prerequisite: ECE 7, ECE 17, and ECE 20 with a grade of C or higher 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* (when offered in the Distance Education format, lecture hours will total 270)
*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 of developmentally appropriate practice that are 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 of early childhood education professionals, they have the opportunity to work directly with the children to test the methods and refine the teaching skills explored in the course. Students will have the opportunity to practice and demonstrate skills that focus on child centered, play based approaches to teaching by designing, implementing, and evaluating developmentally appropriate activities as well as gaining practical knowledge of learning and assessment. Knowledge of curriculum design will be emphasized as students plan, prepare, present and evaluate experiences that promote positive development and learning for young children with a focus on child-centered, play based approaches, knowledge of the curriculum areas, and experience connecting theory to practice. The lecture component of this course may be offered in distance education format.

## 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: ECE 7 with a grade of C or higher
Advisory: ECE 3 with a grade of $C$ or higher
Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 108)
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. This course may be offered in a distance education format.

## 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 (when offered in the Distance Education format, hours will total 162)
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. This course may be offered in a distance education format.

ECE 26 THE CHILD WITH SPECIAL NEEDS - 3 Units
Prerequisite: ECE 1or ECE 9 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 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: ECE 26 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 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 selfexamination 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: ECE 20 with a grade of $C$ or higher
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: ECE 20 with a grade of $C$ or higher
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: ECE 20 with a grade of $C$ or higher
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.

## 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.

## 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: ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12, or ESCI 15, or ESCI 17 with a grade of C or higher
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: ESCI 1 with a grade of $C$ or higher
Corequisite: CHEM 1A or previous completion of 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: ESCI 2 and ESCI 3 with a grade of C or higher 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 education 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. 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 (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)
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 of 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. The lecture portion of this course may be offered in a distance education format.

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 human-influenced, 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: ESCI 1 and ESCI 3 with a grade of C or higher
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, oceanatmosphere 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 education 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 led 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: ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12 with a grade of C or higher and ESCI 2 with a grade of C or higher
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: ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12 with a grade of C or higher
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) <br> Grading: Pass/No Pass Option

Prerequisite: ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12 with a grade of C or higher
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 on-site 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 8hour 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 (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 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.

## ECONOMICS (ECON)

ECON 1A PRINCIPLES OF ECONOMICS (MICRO) - 3 Units
Grading: Pass/No Pass Option
Prerequisite: MATH 101 with a grade of C or higher, or Math Placement Level 3 or higher.
Advisory: ENGL 280 with a grade of C or higher, 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
Prerequisite: MATH 101 with a grade of C or higher, or Math Placement Level 3 or higher.
Advisory: ENGL 280 with a grade of C or higher, 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, teacherchild relationships, teaching methods, school resources, staff relations, curriculum patterns, authority, and discipline in the schools.

## 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.

## EDUCATION - TEACHER EDUCATION

(EDTE)
EDTE 51 CLASSROOM EXPERIENCE I-READING - 1 Unit (formerly EDTE 55)
Corequisite: 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 (formerly EDTE 60)

Corequisite: 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 indepth 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: 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) <br> Corequisite: 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 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 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 one-hour 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 one-hour 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 one-hour 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: INDE 138 with a grade of C or higher
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: ENER 101 with a grade of C or higher 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: INDE 138 with a grade of C or higher
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: ENER 151 with a grade of C or higher
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: MATH 10 with a grade of C or higher 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: MATH 10 with a grade of C or higher or Math Placement Level 5 or higher, and ENGR 1A with a grade of $C$ or higher
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 - 4 Units

Prerequisite: MATH 4A and PHYS 4B with a grade of C or higher Corequisite: MATH 4B or previous completion of MATH 4B 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 22 ENGINEERING GRAPHICS - $\mathbf{2}$ Units

Prerequisite: ENGL 270 with a grade of C or higher, or English Placement Level 4 or higher; and MATH 220 with a grade of C or higher 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: ENGR 22 with a grade of C or higher 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 27 MAP \& COMPUTER-AIDED DRAFTING - 3 Units <br> Grading: Pass/No Pass Option <br> Prerequisite: ENGR 29 with a grade of C or higher <br> Advisory: ENGR 1A with a grade of $C$ or higher <br> 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: ENGR 22 or previous completion of 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 <br> Grading: Pass/No Pass Option <br> Prerequisite: ENGR 29 with a grade of C or higher <br> 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: ENGR 21 with a grade of C or higher 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 <br> Grading: Pass/No Pass Option

Prerequisite: ENGR 27 and ENGR 1A with a grade of $C$ or higher 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: ENGR 29 with a grade of C or higher
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: PHYS 4A with a grade of C or higher
Corequisite: MATH 4A or previous completion of MATH 4A with a grade of C or higher
Advisory: ENGL 190 with a grade of C or higher, 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 Units

Prerequisite: MATH 10 with a grade of C or higher, 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 twodimensional 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: ENGR 37 or ENGR 35 with a grade of C or higher 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 40 STRENGTH OF MATERIALS - 3 Units
Prerequisite: ENGR 35 with a grade of $C$ or higher
Class Hours: 54 lecture total
This course is a study of stresses, stains and deformations associated with axial, torsional and flexural loading of bars, shafts and beams, as well as pressure loading of thin-walled pressure vessels. The course also covers stress and strain transformation, Mohr's Circle, ductile and brittle failure theories, and the buckling of columns. Statically indeterminate systems are also studied.

ENGR 45 PROPERTIES OF MATERIALS - 4 Units
Prerequisite: PHYS 4A with a grade of C or higher
Class Hours: 54 lecture/54 lab total
This course presents the internal structures and resulting behaviors of materials used in engineering applications, including metals, ceramics, polymers, composites, and semiconductors. The emphasis is upon developing the ability both to select appropriate materials to meet engineering design criteria and to understand the effects of heat, stress, imperfections, and performance. Laboratories provide direct observations of the structures and behaviors discussed in the course, experience with the operation of testing equipment, and the preparation of experimental reports.

## ENGR 64 ENGINEERING MATERIAL TESTING - 3 Units

Prerequisite: ENGL 270 with a grade of C or higher, or English Placement Level 4 or higher, MATH 220 with a grade of C or higher, 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.

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.

## 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: ENGL 190 with a grade of C or higher or English Placement Level 6 or higher, or ESL 138 with a grade of $C$ or higher 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: ENGL 1A with a grade of C or higher, 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: ENGL 1A with a grade of C or higher 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 1650) - 3 Units
Grading: Pass/No Pass Option
Prerequisite: ENGL 1A with a grade of C or higher 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 1650. 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 1650) - 3 Units
Grading: Pass/No Pass Option
Prerequisite: ENGL 1A with a grade of C or higher 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 1650 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 SURVEY OF AMERICAN LITERATURE-Pre-Colonial to

 1860-3 UnitsGrading: Pass/No Pass Option
Prerequisite: ENGL 1A with a grade of C or higher 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 SURVEY OF AMERICAN LITERATURE-1860 to Present - 3 Units

Grading: Pass/No Pass Option
Prerequisite: ENGL 1A with a grade of C or higher 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 13A SURVEY OF ENGLISH LITERATURE (Old English Period through Neoclassicism) - 3 Units
Grading: Pass/No Pass Option
Prerequisite: ENGL 1A with a grade of C or higher 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 SURVEY OF ENGLISH LITERATURE (from the Romantic Period to Present) - 3 Units

Grading: Pass/No Pass Option
Prerequisite: ENGL 1A with a grade of C or higher, 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 SURVEY OF DRAMA AS LITERATURE - 3 Units
Grading: Pass/No Pass Option
Prerequisite: ENGL 1A with a grade of C or higher, 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 LITERATURE BY AND ABOUT WOMEN - 3 Units
Prerequisite: ENGL 1A with a grade of C or higher, 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 studied 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: ENGL 1A with a grade of C or higher, 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: ENGL 1A with a grade of C or higher, 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 education format.

ENGL 18 AFRICAN AMERICAN LITERATURE - 3 Units
Grading: Pass/No Pass Option
Advisory: ENGL 1A with a grade of C or higher 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 SURVEY OF BIBLE AS LITERATURE - 3 Units

Grading: Pass/No Pass Option
Prerequisite: ENGL 1A with a grade of C or higher, 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: ENGL 1A with a grade of C or higher, 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 <br> Grading: Pass/No Pass Option <br> Prerequisite: ENGL 1A with a grade of C or higher, or English Placement Level 7 <br> Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162) <br> This course is an introduction to multiethnic literary currents in American literature and will focus on African-American, Asian-

American, Hispanic-American, Pacific-Islander, and/or NativeAmerican 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: ENGL 1A with a grade of $C$ or higher, 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: ENGL 190 or ESL 138 with a grade of C or higher, 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: ENGL 1A with a grade of $C$ or higher, 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: ENGL 1A with a grade of C or higher 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 129 GRAMMAR REVIEW: GRAMMATICAL AND EFFECTIVE SENTENCES - 1 Unit

Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
Emphasizes structure, variety, effectiveness, and sentence style. Includes a diagnosis of the individual's writing needs, methods of
proofreading, rules of punctuation, and techniques for revision. This course may be offered in a distance education format.

ENGL 190 READING AND WRITING II - 4 Units
Prerequisite: ENGL 280 with a grade of C or higher, 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, well-supported, 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 Units

Prerequisite: ENGL 280 with a grade of C or higher, 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 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: ENGL 191 with a grade of C or higher
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 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 Unit <br> Prerequisite: ENGL 191 with a grade of C or higher <br> 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 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 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: ENGL 191 with a grade of C or higher
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 basic 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 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 <br> Prerequisite: English Placement Level 2 or higher <br> Class Hours: 54 lecture, 54 lab total

This course is constructed to help students enhance personal reading and work-related 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
This course will be deactivated as of Spring 2015
Prerequisite: ENGL 260 with a grade of C or higher 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

Grading: Pass/No Pass Option
Prerequisite: ENGL 260 with a grade of C or higher, or English Placement Level 3 or higher

## Class Hours: 72 lecture total

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.

## ENGL 350 READING AND WRITING FOUNDATIONS - 0 Units

Advisory: English Placement Level 1 or higher
Class Hours: 54-108 lab total
This course is designed to help students read and write proficiently in daily life, in the workplace, and in preparation for academic study. With the instructor's guidance, students will identify their personal goals for taking this course and develop an individual plan for meeting them. The course will provide one-on-one and small group instruction in basic reading and writing skills. This course may be repeated any number of times.

## 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 <br> Grading: Pass/No Pass Option

Prerequisite: ESL 236 with a grade of C or higher 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-4 Units

Grading: Pass/No Pass Option
Prerequisite: ESL 236 with a grade of C or higher or ESL Placement Level 7 or higher
Class Hours: 72 lecture total
This is an academic course for non-native speakers of English designed to develop writing fluency. Emphasis is on writing short compositions, developing process-writing skills and learning common methods of organization for college-level writing assignments. This course offers a limited review of English grammatical patterns. For a more thorough review, students are advised to enroll in ESL 137L ESL Grammar Lab.

## ESL 137L ESL GRAMMAR LAB - 1 Unit

Grading: Pass/No Pass Option
Prerequisite: ESL 236 with a grade of C or higher or ESL 137 with a minimum grade of $C$ or higher
Class Hours: 54 lab total
This course is designed to develop and refine the grammar skills of intermediate to high intermediate English as a Second Language college students. It integrates the study of grammar in listening, speaking, reading and writing activities, which are contextualized and communicative.

## ESL 138 COMPOSITION II - 4 Units

Grading: Pass/No Pass Option
Prerequisite: ESL 137 with a grade of C or higher or ESL Placement Level 8 or higher
Class Hours: 72 lecture
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 some grammatical patterns as they relate to refining writing skills. For more thorough instruction in grammar, students are advised to take ESL 138L, ESL Grammar Lab II.

## ESL 138L ESL GRAMMAR LAB II - 1 Unit

Grading: Pass/No Pass Option
Prerequisite: ESL 137 with a grade of C or higher or ESL 138 with a grade of C or higher
Class Hours: 54 lab
This is a high-intermediate to advanced course in grammar for nonnative speakers of English. The emphasis is on developing grammar
skills to enhance and refine college-level writing and editing. The course will include a quick review of the basics, but the focus will be on advanced grammatical structures as they relate to improving student writing.

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, ESL 234 with a grade of $C$ or higher, 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 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: ESL 234 with a grade of C or higher or ESL Placement Level 6 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.

## 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: FSS 10 with a grade of C or higher
Class Hours: 54 lecture total
This course explores the theoretical perspectives and professional standards involved in 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 14 INTRODUCTION TO CASE MANAGEMENT - 3 Units
Class Hours: 54 lecture total
This course introduces the student to the role and importance of the case manager within the field of Human Services/Social Work. The philosophical differences of various models will be explored along with the pragmatic skills and practices that combine for effective case management: engagement, interviewing, assessment, identification of goals and resources, monitoring progress and evaluating outcomes. Emphasis will be placed on professional standards and practices of conduct as well as documentation and record-keeping skills that align with legal mandates

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

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)

## 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: FSS 25 with a grade of $C$ or higher
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 totalDesigned 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)

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.

## 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 preplanning 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 - $\mathbf{3}$ 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 firefighting 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.

## 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 firsthand 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
Prerequisite: FAID 175 or FAID 132 with a grade of B or higher and FAID 133 with a grade of $B$ of higher
Notes:
1). The California State Fire Marshal's Office requires that all Firefighter I summative tests be completed with a minimum score of $80 \%$ (a grade of B or higher). Any student who does not meet this standard will have failed FIRS 104 and will not receive credit for the course, nor will the student receive individual unit or course completion certificates.
2). Any student enrolling in FIRS 104 must have completed the prerequisites of FAID 132 and FAID 133 at Shasta College (or their equivalents at another institution), or FAID 175 (or the equivalent at another institution). Students who attempt to satisfy these prerequisites with courses from another institution must provide transcripts that verify a minimum grade of B (80\%) has been met.
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, 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 DRIVERIOPERATOR 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 CA 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 CA 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 firefighting 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 FIREFIGHTING 1.5 Units

Class Hours: 18 lecture/27 lab total
This course meets requirements in the natural resources and fire science programs. A review of fire chemistry, equipment, and manpower, basic firefighting 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 120 INCIDENT COMMAND SYSTEM ICS-200 - 1 Unit Grading: Pass/No Pass Option
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.
Class Hours: 18 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.)

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 (www.www.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 (www.nifc.gov).

## FIRS 145 LOW ANGLE RESCUE - . 5 Unit

Grading: Pass/No Pass Option
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.
Class Hours: 27 lab total
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 firefighting coat and pants, boots, eye protection, etc.

## FIRS 146 STANDARD FOR SURVIVAL - 1 Unit <br> Grading: Pass/No Pass Option <br> 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. Students who are legally mandated to repeat this curriculum should contact the Division for additional information.

## FIRS 156 FIRE CONTROL 6: WILDLAND FIREFIGHTING ESSENTIALS - 1 Unit

Grading: Pass/No Pass Option
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.
Class Hours: 18 lecture total
This course provides information, methods and techniques for wildland firefighting strategy and structure triage, terminology, survival skills, and operating safely in a wildland firefighting incident.

FIRS 158 PUMP OPERATIONS - 0.5 Unit
Grading: Pass/No Pass Option
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.
Class Hours: 9 lecture/9 lab
This course provides the student with the information and skills training for operating fire service pumps. Topics include types of pumps, engine and pump gauges, maintenance, unsafe pumping conditions, pressure relief devices, cooling systems, water supply, drafting, and field hydraulics. Each student will have the opportunity to increase his or her pumping skills during simulated pumping conditions.

FIRS 177 FIRE PREVENTION 1-2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course will provide the student with a basic knowledge of the Company Officer certification track and Capstone Task Book process. The student will also be equipped with knowledge and skills related to the Company Officer's role in fire prevention, the relationship between life safety and building construction, the elements of a quality company inspection program, and how to address complex hazards encountered during an inspection.

## FIRS 180 FIRE MANAGEMENT 1 - $\mathbf{2 . 5}$ 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 total
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 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 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 education format.

## FIRS 194 TRAINING INSTRUCTOR 1B (PSYCHOMOTOR) 1.5 Units (formerly FIRS 182)

Prerequisite: FIRS 193 with a grade of C or higher
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 education format.

## FIRS 195 TRAINING INSTRUCTOR 1C (INSTRUCTIONAL DEVELOPMENT TECHNIQUES) - $\mathbf{1 . 5}$ Units

Prerequisite: FIRS 193 and FIRS 194 with a grade of C or higher 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 education format.

## 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 firefighting 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 totalThis 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.

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 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 (www.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 3101 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 (www.nifc.gov).

## FTWL 132 SUPPLY UNIT LEADER S-356-1.5 Units <br> 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 3101 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 (www.nifc.gov).

## FTWL 134 COMMUNICATIONS UNIT LEADER S-358-4 Units Grading: Pass/No Pass Option <br> 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 (www.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 nonoperations 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 (www.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 (www.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 (www.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 (www.nifc.gov).

FTWO 114 INITIAL ATTACK INCIDENT COMMANDER TYPE 4 (ICT4) S-200 - 1.5 Units
Grading: 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 (www.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 (www.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 firefighting. 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 (www.nifc.gov).

## FTWO 118 WILDFIRE POWERSAWS S-212-1 Unit

Class Hours: 16 lecture/12 lab total
Wildfire Power saws 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 (www.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 (www.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 310I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (www.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 (www.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 (www.nifc.gov).

## FTWO 129 INTERAGENCY INCIDENT BUSINESS MANAGEMENT S-260 - 1.5 Units

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 (www.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 (www.nifc.gov).

## FTWO 132 INTERMEDIATE WILDLAND FIRE BEHAVIOR S-290 2 Units

Prerequisite: FTWO 113 with a grade of C or higher Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This is a classroom-based skills course designed to prepare the prospective fireline supervisor to undertake safe and effective fire management operations. It is the second course in a series that collectively serves to develop fire behavior prediction knowledge and skills. Fire environment differences are discussed as necessary and should include local conditions affecting fire behavior. 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 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 Office or at the National Interagency Fire Center Web Site (www.nifc.gov). 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.

## 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 3101 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 (www.nifc.gov).

## FTWO 134 LEADERSHIP \& ORGANIZATONAL DEVELOPMENT 3 Units

Class Hours: 27 lecture/81 lab total
This 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 (www.nifc.gov).

## FTWO 135 TASK FORCEISTRIKE TEAM LEADER S-330 1.5 Units <br> Grading: Pass/No Pass Option <br> 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 (www.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 (www.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 (www.nifc.gov).

## FTWO 141 AIR SUPPORT GROUP SUPERVISOR J-375 1.5 Units <br> Grading: Pass/No Pass Option <br> 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 (www.nifc.gov).

## FTWO 144 INTRODUCTION TO WILDLAND FIRE BEHAVIOR CALCULATIONS S-390-2 Units <br> Grading: Pass/No Pass Option <br> 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 (www.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 (www.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 (www.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 (www.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 (www.nifc.gov).

## FTWO 158 FACILITATIVE INSTRUCTOR M-410 - 2 Units

 Class Hours: 40 lecture totalThis 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 (www.nifc.gov).

## FTWO 160 HAZARDOUS MATERIALS FIRST RESPONDER UPDATE - . 5 Unit <br> Grading: Pass/No Pass Option <br> 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 (www.nifc.gov).

FIRE TECHNOLOGY/WILDLAND FIRE TECHNOLOGY PREVENTION (FTWP)

## FTWP 114 WILDFIRE ORIGIN AND CAUSE DETERMINATION P-151 - 1.5 Units <br> Grading: Pass/No Pass Option <br> 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 (www.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 totalThis 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 <br> RESCUER - . 5 Unit

Grading: Pass/No Pass Option
Note: Meets criteria for either the American Red Cross or American Heart Association
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 175 EMERGENCY MEDICAL TECHNICIAN 1 BASIC 5 Units

Prerequisite: FAID 133 with a grade of $C$ or higher, 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 information. Notes:

1. Twenty-four hours of clinical experience at a hospital emergency room or on an ambulance or an authorized rescue squad will be required. Providers in the area have requirements for participation in ambulance observation time. Requirements include 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 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 2010 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 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
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- 1 Unit (formerly FAID 178AD)

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 SierraSacramento 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.

## 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 <br> 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: FREN 1 with a grade of C or higher 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: FREN 2 with a grade of C or higher, 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: FREN 3 with a grade of $C$ or higher 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.

## GEOGRAPHY AND GEOSPATIAL TECHNOLOGIES

 (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 tota
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: ENGL 280 with a grade of C or higher or English Placement Level 5 or higher
Class Hours: 54 lecture tota
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: GIS AND SOCIETY - 3 Units
Grading: Pass/No Pass Option
Advisory: ENGL 190 with a grade of C or higher 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 nonprofit 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: ENGL 280 with a grade of $C$ or higher 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: ENGL 280 with a grade of C or higher 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 9 MAP AND GEOSPATIAL PRINCIPLES - 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 course is an introduction to maps, imagery, and geospatial technologies. Students will learn geographic techniques for data collection, interpretation, and presentation. Map principles along with types of maps and their applications are covered. Methodologies include map reading, use of imagery, geographic information systems (GIS), global positioning systems (GPS), and map creation. This course may be offered in a distance education format.

[^9]viewing, acquisition, manipulation, geographic referencing, and map creation. GIS data types, properties, database operations and applications are covered. Basic methods of GIS analysis are also included. This course may be offered in a distance education format.

GEOG 12 GIS DATA DESIGN AND CAPTURE - 3 Units
Grading: Pass/No Pass Option
Prerequisite: GEOG 10 with a grade of C or higher
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This course covers design and implementation of geographic databases for GIS data capture and management. Included are essential concepts and practices of relational database management systems, with specific application to GIS. Data is captured using GPS and mobile GIS methods. GIS digitizing and editing are also covered. This course may be offered in a distance education format.

## GEOG 13 GIS SPATIAL ANALYSIS - 3 Units

Grading: Pass/No Pass Option
Prerequisite: GEOG 10 with a grade of C or higher
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This course covers GIS for investigating geographic patterns, relationships and connections. Spatial analysis methods are employed for both raster and vector data. Emphasis is on problem-solving and decision making using GIS. Models and scripts for automating GIS processes also undertaken. This course may be offered in a distance education format.

## GEOG 14 GIS CARTOGRAPHY AND VISUALIZATION - 3 Units Grading: Pass/No Pass Option <br> Prerequisite: GEOG 10 with a grade of $C$ or higher

Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This course covers fundamental concepts of cartography and visualization using geographic information systems (GIS). Students employ design principles to create effective maps, incorporating data from a variety of formats. Hardcopy and web maps are produced. Animations, 3D maps, and other visualization techniques are explored. This course may be offered in a distance education format.

GEOG 15 INTRODUCTION TO REMOTE SENSING - 3 Units Grading: Pass/No Pass Option
Prerequisite: GEOG 9 with a grade of C or higher
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)

This course covers remote sensing fundamentals as they apply to mapping of Earth's surface. Electromagnetic spectrum of radiant energy and the radiation emitted from Earth surface provide a foundation for understanding of the types of imagery available and their characteristics. Image enhancement, classification and quantitative techniques are explored with attention to integration with GIS datasets. Application of remote sensing for land cover change, vegetation classification, and environmental quality are explored. This course may be offered in a distance education format.

## GEOG 21 GIS-CAD INTEGRATION - 1 Unit (formerly GIS 21)

Grading: Pass/No Pass Option
Advisory: GEOG 10 with a grade of C or higher 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.

GEOG 24 CUSTOMIZING GIS - 1 Unit (formerly GIS 24)
Grading: Pass/No Pass Option
Advisory: GEOG 10 with a grade of $C$ or higher
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.

## GEOG 25 GIS PROJECTS - 1 Unit (formerly GIS 25)

Grading: Pass/No Pass Option
Advisory: GEOG 10 with a grade of C or higher 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.

## GEOG 94 GEOGRAPHIC INFORMATION SYSTEMS WORKSITE LEARNING - 1-8 Units (formerly GIS 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.

## 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 <br> Grading: Pass/No Pass Option <br> 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: GERM 1 with a grade of C or higher, 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.

## 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) <br> Grading: Pass/No Pass Option <br> 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.

## HEALTH OCCUPATIONS <br> (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. This course may be offered in a distance education 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.

## 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 education format

HEOC 130 NURSE ASSISTANT - 11 Units
Class Hours: 128 Lecture, 256 Lab total
Limitation on Enrollment: Students must meet health and safety clinical requirements. See www.shastacollege.edu/HSUP/NAHHA/generalinformation or call 530-339-3600 for detailed information on requirements.
Note: Upon enrollment all students must be fingerprinted through the Live Scan process. Students will not receive a certificate until they have received criminal record clearance.
This course is designed to prepare students to perform the basic skills required for employment as a Certified Nursing Assistant. The course is approved by the Department of Public Health 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 131 HOME HEALTH AIDE - 1.5 Units
Grading: Pass/No Pass Only
Class Hours: 20 Lecture, 27 Lab total
Limitation on Enrollment: Students must complete HEOC 130 with a grade of C or higher, and pass the National Nurse Aide Assessment Program examination or possesses current Nurse Assistant Certification.
Course is designed to prepare students to provide nursing care in the home setting by expanding the role of the nurse assistant. Upon successful completion students will be eligible for Home Health Aide certification through the California Department of Public Health.

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.

## HISTORY (HIST)

HIST 1A HISTORY OF WESTERN CIVILIZATION - 3 Units
Grading: Pass/No Pass Option
Advisory: ENGL 190 with a grade of C or higher or English Placement Level 6 or higher, or ESL 138 with a grade of C or higher
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 pre-history 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: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher, or ESL 138 with a grade of C or higher
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: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher, or ESL 138 with a grade of $C$ or higher
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 - 3 Units

Advisory: ENGL 190 with a grade of C or higher or English Placement Level 6 or higher, or ESL 138 with a grade of $C$ or higher
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 multiperspective 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: ENGL 190 with a grade of C or higher or English Placement Level 6 or higher, or ESL 138 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 is a survey of the history of the United States from PreColumbian 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: ENGL 190 with a grade of C or higher or English Placement Level 6 or higher; or ESL 138 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 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: ENGL 190 with a grade of C or higher or English Placement Level 6 or higher, or ESL 138 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 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: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher, or ESL 138 with a grade of C or higher
Class Hours: 54 lecture total
History 35 traces the social, economic, and political history of Mexican Americans from the Spanish conquest to the present. Focus will be on the historical trajectory of Mexican Americans as they emerged from a series of migrations, conflicts, and negotiations with Native Americans, Anglo Americans, and others. The course will also explore the unique social, economic, and political forces that shaped U.S. policies toward Mexican migrants and Mexican Americans.

## HIST 36 HISTORY OF THE FAR EAST - 3 Units

Grading: Pass/No Pass Option
Advisory: ENGL 190 with a grade of C or higher or English Placement Level 6 or higher, or ESL 138 with a grade of C or higher
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: ENGL 190 with a grade of C or higher or English Placement Level 6, or higher or ESL 138 with a grade of C or higher
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 <br> Advisory: ENGL 190 with a grade of C or higher or English Placement Level 6, or higher or ESL 138 with a grade of C or higher <br> Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162) <br> A survey of the history and government of California. Topics will include California Indians, Spanish colonization, Californios, US

annexation, economic development, demographic shifts, and current social, political, and economic issues. This course may be offered in a distance education format.

HIST 55 HISTORY OF THE AMERICAN WEST - 3 Units
Grading: Pass/No Pass Option
Advisory: ENGL 190 with a grade of C or higher or English Placement Level 6, or higher or ESL 138 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 is designed as a survey of the history of the North American West. The course covers the history of North American Indians, wars, statehood, resource extraction, demographic shifts, the relationship with the federal government, through the economic, political, and social issues of the present day. The course will introduce various ways of analyzing the history of the American West, including the Frontier Thesis, New Western History, and regionalism. In addition, the course will exam how the American West has been portrayed in popular literature, television, and film. This course may be offered in a distance education format.

HIST 57 RUSSIAN HISTORY - 3 Units
Grading: Pass/No Pass Option
Advisory: ENGL 190 or English Placement Level 6 or higher, or ESL 138 with a grade of C or higher
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 <br> 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 serviceoriented 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 <br> 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.

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.

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 topics 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.

## 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 <br> Grading: Pass/No Pass Option

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
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. This course may be offered in a distance education format.

HUM 70 EXPLORING CONTEMPORARY TELEVISION - 3 Units
Grading: Pass/No Pass Option
Advisory: ENGL 190 with a grade of C or higher 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 <br> 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.

## 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 total
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 138 FUNDAMENTALS OF ELECTRONICS AND

ELECTRICITY - 3 Units (form. ELEC 138, ELEC 138/139)
Advisory: MATH 101 with a grade of C or higher or Math Placement Level 3 or higher, and ENGL 270 with a grade of C or higher 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.

## 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: JAPN 2 with a grade of C or higher 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: JAPN 3 with a grade of C or higher 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: JAPN 1 with a grade of C or higher or Foreign Language Placement Level 2
Advisory: ENGL 280 with a grade of C or higher, 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: JAPN 19 with a grade of C or higher or Foreign Language Placement Level 3
Advisory: ENGL 280 with a grade of C or higher, 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 <br> Grading: Pass/No Pass Option <br> 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: ENGL 190 with a grade of C or higher, 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.

JOUR 27 NEWSWRITING AND REPORTING - 3 Units
Grading: Pass/No Pass Option
Advisory: ENGL 190 with a grade of C or higher or English Placement Level 6, and ability to type 25 wpm
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
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. This course may be offered in a distance education format.

## 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 picturetaking techniques and digital imaging procedures.

## KINESIOLOGY

## (KINES)

KINES 1 FOUNDATIONS OF KINESIOLOGY - 3 Units (formerly PE 10, HPE 8)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
An introduction of the professional foundations of human movement to include career opportunities in areas of teaching, coaching, Allied Health and fitness; and an overview of the sub-disciplines in kinesiology. Course topics will include history, philosophy, concepts, programs, qualification, careers, issues, and future of the discipline.

KINES 2 SPORTS EMERGENCY CARE - 3 Units (formerly HLTH 10, PEAT 1, HPE 91)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Theory and practice in care and prevention of injuries. Course will cover basic injury prevention, recognition, emergency care and immediate treatment of injuries. Students will have the opportunity to become certified in standard first aid, CPR, and AED upon completion of requirements.

## MATHEMATICS (MATH)

## MATH 2 PRECALCULUS - 5 Units

Prerequisite: MATH 102 with a grade of C or higher, or Math Placement Level 4 or higher
Advisory: ENGL 190 with a grade of C or higher, 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 2A PRECALCULUS COLLEGE ALGEBRA - 4 Units
Prerequisite: MATH 102 with a grade of C or higher, or Math Placement Level 4 or higher
Advisory: ENGL 190 with a grade of C or higher
Note: Students may take either MATH 2A or MATH 2B, or MATH 2 in order to meet transfer requirements. Successful completion of both MATH 2A and MATH 2B is the equivalent of MATH 2.
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
This college level course introduces functions and function algebra for majors in science, technology, engineering, and mathematics. The main focus is on linear, absolute value, polynomial, radical, 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 distance education format.

[^10]content includes trigonometric functions of real numbers and angles, analytic trigonometry and applications, polar coordinates, parametric equations, and introduction to vectors. This course may be offered in a distance education format.

## MATH 3A CALCULUS 3A-4 Units

Prerequisite: MATH 2 with a grade of C or higher, or MATH 2B with a grade of C or higher, or Math Placement Level 5 or higher
Advisory: ENGL 190 with a grade of C 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-5 Units

Prerequisite: MATH 3A with a grade of C or higher or Math Placement Level 6 or higher
Advisory: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher
Class Hours: 90 lecture total (when offered in the Distance Education format, hours will total 270)
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. Parametric and polar curve differentiation and integration. This course may be offered in a distance education format.

## MATH 4A CALCULUS 4A - 4 Units

Prerequisite: MATH 3B with a grade of C or higher, or Math Placement Level 7 or higher
Advisory: ENGL 190 with a grade of C or higher, 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, Stokes' and Green's Theorems.

MATH 4B DIFFERENTIAL EQUATIONS - 4 Units
Prerequisite: MATH 3B with a grade of C or higher, or Math Placement Level 7 or higher
Advisory: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher
Class Hours: 72 lecture total
An introduction to ordinary differential equations, using qualitative, numerical, and analytic methods to investigate solutions. The course covers first order equations, systems of first order equations and linear second order equations. Topics include matrix methods, use of complex variables, Laplace transforms, and series solutions. Applications involving modeling with differential equations are included throughout the course.

MATH 6 LINEAR ALGEBRA - 3 Units
Prerequisite: MATH 3B with a grade of C or higher, 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: MATH 102 with a grade of C or higher, or Math Placement Level 4 or higher
Advisory: ENGL 190 with a grade of C or higher, 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: MATH 102 with a grade of C or higher, or Math Placement Level 4 or higher
Advisory: ENGL 190 with a grade of C or higher, 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: MATH 102 with a grade of C or higher, or Math Placement Level 4 or higher
Advisory: ENGL 190 with a grade of C or higher, 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: MATH 102 with a grade of C or higher 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 FOR LIBERAL ARTS - 3 Units (formerly MATH 1)

Prerequisite: MATH 102 with a grade of C or higher or Math Placement Level 4 or higher
Advisory: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This is a college level course for majors in the Liberal Arts that introduces functions and function algebra. The main focus is on linear, polynomial, rational, radical, absolute value, logarithmic and exponential functions and equations. Students will learn algebraic techniques, modeling techniques and technology-based techniques for solving equations and inequalities involving these functions and for investigating the graphs of these functions. This course also covers systems of equations. This course may be offered in a distance education format.

## MATH 14 INTRODUCTION TO STATISTICS - 4 Units

Prerequisite: MATH 102 with a grade of C or higher, or Math Placement Level 4 or higher
Advisory: ENGL 190 with a grade of C or higher 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 chisquare, statistical inference using confidence intervals and hypotheses testing. This course may be offered in a distance education format.

## MATH 17 CALCULUS FOR SOCIAL AND LIFE SCIENCES 4 Units

Prerequisite: MATH 3A with a grade of $C$ or higher, or Math Placement Level 6 or higher
Advisory: ENGL 190 with a grade of C or higher, 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 education format.

## MATH 41A CONCEPTS OF ELEMENTARY MATHEMATICS 3 Units

Prerequisite: MATH 102 with a grade of C or higher, or Math Placement Level 4 or higher
Advisory: ENGL 190 with a grade of C or higher, or English Placement
Level 6 or higher, or ESL 138 with a grade of C or higher, or ESL Placement Level 8 or higher
Note: This course is valuable for students intending to become elementary school teachers.
Class Hours: 54 lecture total
Emphasis is on development of quantitative reasoning skills through indepth investigations of mathematics topics, which include: patterns and sequences, inductive and deductive reasoning, problem solving, logic, set theory, set of real numbers and its subsets.

## MATH 41B CONCEPTS OF ELEMENTARY MATHEMATICS 3 Units

Prerequisite: MATH 102 with a grade of C or higher or Math Placement Level 4 or higher (MATH 41A is not a prerequisite for MATH 41B)
Advisory: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher, or ESL 138 with a grade of C or higher, or ESL Placement Level 8 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 100 TECHNICAL APPLICATIONS OF MATHEMATICS 3 Units

Prerequisite: MATH 240 or MATH 260 with a grade of C or higher, or Math Placement Level 2 or higher
Advisory: ENGL 280 with a grade of C or higher, 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: MATH 240 or MATH 260 with a grade of $C$ or higher, or Math Placement Level 2 or higher
Advisory: ENGL 280 with a grade of C or higher, 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 <br> 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: MATH 101 with a grade of C or higher or Math Placement Level 3 or higher
Advisory: ENGL 190 with a grade of C or higher, 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: MATH 101, MATH 100 with a grade of C or higher, or Math Placement Level 3 or higher
Advisory: ENGL 280 with a grade of C or higher, 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- 1 Unit (formerly GS 100)
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 220 BASIC MATHEMATICS - 3 Units

Advisory: ENGL 260 with a grade of C or higher 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: MATH 220 with a grade of C or higher, or Math Placement Level 1 or higher
Advisory: ENGL 260 with a grade of C or higher 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: ENGL 260 with a grade of C or higher 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.

## MICROBIOLOGY (MICR)

MICR 1 MICROBIOLOGY - 5 Units
Prerequisite: CHEM 1A, 2A, or CHEM 2B with a grade of $C$ or higher 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 which is suitable for music majors as a prerequisite for further theory study. Class includes pitch notation, melody, rhythm, and meter, scales and modes, intervals, keys and key signatures, triads, chords, and some sightsinging. Course is designed for Elementary Education majors and PreMusic Core Program. Some math, especially fractions, is necessary. A computerized skills tutorial is included in the text and is required. Piano skills are helpful in maximizing learning in this course. Development of skills in handwritten notation is expected. This course is commonly transferable to a baccalaureate program.

MUS 2 DIATONIC HARMONY AND MUSICIANSHIP - 4 Units Grading: Pass/No Pass Option
Prerequisite: MUS 1 with a grade of C or higher Class Hours: 72 lecture
A study of scales and modes, key signatures and intervals, handwritten notation of pitch, and rhythms of simple and compound meters. Anatomy of harmony and melody. Four part harmonic writing, basic progressions, cadential formulas and integration of both with ear training and sight-singing. Analysis of music and composition will be concurrent with materials studied, which include phrase structure, figured bass symbols, and introductory dominant sevenths. 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. Course may be challenged and is transferable.

## MUS 3 ADVANCED DIATONIC HARMONY \& MUSICIANSHIP 4 Units

Grading: Pass/No Pass Option
Prerequisite: MUS 2 with a grade of C or higher
Class Hours: 72 lecture
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. Introduction to two part counterpoint. The syntax of all diatonic chords and their hierarchy in the harmonic language will be learned, along with all inversions. This course applies and develops the rhythmic, melodic, and harmonic materials of Music 2 through ear training, sight singing, analysis, and dictation.

## MUS 4 CHROMATIC HARMONY - 4 Units

Grading: Pass/No Pass Option
Prerequisite: MUS 3 with a grade of C or higher
Class Hours: 72 lecture
This course applies and develops the rhythmic, melodic, and harmonic materials of Music 3 through ear training, sight singing, analysis, and dictation. 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. Study chromatic alterations as used during the $18^{\text {th }}$ and $19^{\text {th }}$ Centuries, and the concept of SonataAllegro form in an overview of larger forms. The course work utilizes a lab period to build and apply keyboard skills, dictation, sight singing and rhythm skills.

## MUS 5 TWENTIETH CENTURY HARMONY - 4 Units

Grading: Pass/No Pass Option
Prerequisite: MUS 4 with a grade of C or higher
Class Hours: 72 lecture
A study of the composition techniques and harmonic practices of the Twentieth Century and the development of critical judgments about the Century's styles. Not only does this course incorporate the concepts from Music 3, but also in addition, through writing and analysis, it will include: post-Romantic techniques such as borrowed chords and modal mixture, chromatic mediants, Neapolitan and augmented-sixth chords, $9^{\text {th }}, 11^{\text {th }}$ and $13^{\text {th }}$ chords, altered chords and dominants; and $20^{\text {th }}$ Century techniques such as: Impressionism, tone rows, set theory, pandiatonicism and polytonalism, meter, rhythm, and minimalistic ideas. This course applies and develops the rhythmic, melodic, and harmonic materials of Music 4 through ear training, sight singing, analysis, and dictation. 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, sight singing dictation and rhythm 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 Pre-Music 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 21A BEGINNING GUITAR - 1 Unit (formerly MUS 21, 21A)
Grading: Pass/No Pass Option
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.

## MUS 21B INTERMEDIATE GUITAR - 1 Unit

Grading: Pass/No Pass Option
Prerequisite: MUS 21A with a grade of $C$ or higher Note: Students must provide their own instruments Class Hours: 9 lecture/27 lab
A course designed to move the guitar player beyond basic chord use, to further implement notational skills, right hand skills, and to expand the beginner into the active use of E moveable chords, A moveable chords and the moveable scales that enhance the guitar player's basic skills.

MUS 21C ADVANCED INTERMEDIATE GUITAR - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: MUS 21B with a grade of C or higher
Note: Students must provide their own instruments
Class Hours: 9 lecture/27 lab
This course expands the intermediate guitar player beyond the $E$ and A moveable chord forms and scales into the use of the $C$ moveable chord and scale form and the G moveable chord and scale. The course will include more advanced right hand techniques and a review of notation, tablature, and song writing skills.

MUS 21D ADVANCED GUITAR - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: MUS 21C with a grade of C or higher
Note: Students must provide their own instruments
Class Hours: 9 lecture/27 lab
This course expands the intermediate guitar player beyond the E and A moveable chord forms and scales into the use of the $C$ moveable chord and scale form and the G moveable chord and scale. The course will include more advanced right hand techniques and a review of notation, tablature, and song writing skills.

MUS 22A BEGINNING PIANO - 1 Unit (formerly MUS 22)
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 22B INTERMEDIATE PIANO - 1 Unit <br> (formerly MUS 23, 22BD)

Grading: Pass/No Pass Option
Prerequisite: MUS 22A with a grade of C or higher Class Hours: 9 lecture/27 lab
Students will formulate and play several Major scales, their chords and primary cadences; analyze the same in simple music; harmonize simple melodies and perform pieces of a lengthier nature from 4 historic periods. The course will interpret subdivided and more complex rhythms and build confidence in class performance.

## MUS 22C ADVANCED INTERMEDIATE PIANO - 1 Unit <br> Grading: Pass/No Pass Option <br> Prerequisite: MUS 22B with a grade of C or higher <br> Class Hours: 9 lecture/27 lab

Students will formulate and play added Major scales along with their relative minors and cadences thereof; analyze primary and secondary chords; perform lengthier classical works, such as sonatinas, sonatas and minuets-along with music from all 4 periods. Students will develop the ability to interpret keys with more than 2 accidentals.

MUS 22D ADVANCED PIANO - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: MUS 22C with a grade of C or higher
Class Hours: 9 lecture/27 lab
Students will play in more sophisticated keys, with 3 or more accidentals. This course will be a continuation of Major and relative minor scales and cadences and will implement and analyze secondary dominants, 4-part Chorale style and considerably longer pieces from all periods. In-class performances required.

MUS 25A BEGINNING STRINGS - 1 Unit (formerly MUS 25, 25AB)
Grading: Pass/No Pass Option
Advisory: MUS 1 with a grade of C or higher
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.

MUS 25B INTERMEDIATE STRINGS - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: MUS 25A with a grade of C or higher
Note: Instruments provided if available
Class Hours: 9 lecture/27 lab
Study of off the string bowings, vibrato, special effects. The major goals of the course are to establish more advanced intermediate skills with sound pedagogy while playing representative string solo music, simple chamber music, duos, trios, quartets, and Baroque \& Classic Orchestra music with correct bowings and proper style.

## MUS 25C ADVANCED INTERMEDIATE STRINGS - 1 Unit (formerly MUS 25CD) <br> Grading: Pass/No Pass Option <br> Prerequisite: MUS 25B with a grade of C or higher <br> Note: Instruments provided if available <br> Class Hours: 9 lecture/27 lab

An intermediate course in violin, viola, violoncello, and string bass utilizing more advanced positions and shifting on all instruments. Bowing techniques include on-the-string bowings, détaché, linked, legato and mixed bowings when appropriate.

MUS 25D ADVANCED STRINGS - 1 Unit (formerly MUS 25CD)
Grading: Pass/No Pass Option
Prerequisite: MUS 25C with a grade of C or higher
Note: Instruments provided if available
Class Hours: 9 lecture/27 lab
Advanced study of off the string bowings, vibrato, and special effects. The major goals of the course are to establish advanced skills with sound pedagogy while playing representative string solo music, advanced chamber music, duos, trios, quartets, and orchestra music of Romantic and Contemporary repertoire with correct bowings and proper style.

## 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: MUS 29 with a grade of C or higher
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, lyric 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.

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.

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.

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.

## MUS 41 SHASTA COLLEGE WOMEN'S ENSEMBLE - 1 Unit <br> Grading: Pass/No Pass Option <br> 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.

## 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.

## 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.

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.

## 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.

## 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.

## MUS 48 APPLIED MUSIC - . 5 Units

Limitation on Enrollment: Student must be a declared Music major, enrolled in a Music Theory class (MUS 2-5), and enrolled in a large music ensemble (MUS 31-47).
Class Hours: 27 lab total
This course consists of individualized instrumental or vocal study using appropriate techniques and repertoire. The emphasis is on the progressive development of skills needed for solo performance in preparation for transfer to a CSU/US music degree program. Achievement is evaluated through a juried performance.

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.

## 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.

## MUS 61A BEGINNING PERFORMANCE ANALYSIS - . 5 Unit (formerly MUS 61, 61AD) <br> Grading: Pass/No Pass Option

Note: Attendance at a musical event is required. It is recommended that students have a fine arts performance track, such as a solo instrument, voice proficiency, or drama.
Class Hours: 27 lab
A course in the experience of listening, analyzing, and criticizing classical music performances in class and the community. Applied Music students, local musicians, and professional musicians perform and lecture. Required for Pre-Music and Music Core Program.

MUS 61B INTERMEDIATE PERFORMANCE ANALYSIS - 5 Unit
Advisory: MUS 61 A with a grade of C or higher
Note: Attendance at a musical event is required. It is recommended that students have a fine arts performance track, such as a solo instrument, voice proficiency, or drama.
Class Hours: 27 lab
An intermediate level course in the experience of listening, analyzing, and criticizing classical music performances in class and the community. Students must perform on an applied solo instrument, with a college-level short lecture on the material presented. Applied Music students, local musicians, and professional musicians perform and lecture. Required for Pre-Music and Music Core Program.

## MUS 61C ADVANCED INTERMEDIATE PERFORMANCE ANALYSIS - . 5 Unit <br> Advisory: MUS $61 B$ with a grade of $C$ or higher

Note: Attendance at a musical event is required. It is recommended that students have a fine arts performance track, such as a solo instrument, voice proficiency, or drama.
Class Hours: 27 lab
An intermediate level course in the experience of listening, analyzing, and criticizing classical music performances in class and the community. Students must perform on an applied solo instrument using intermediate level literature appropriate for an upper-division audition. Applied Music students, local musicians, and professional musicians perform and lecture. Required for Pre-Music and Music Core Program.

MUS 61D ADVANCED PERFORMANCE ANALYSIS - . 5 Unit
Advisory: MUS 61C with a grade of $C$ or higher
Note: Attendance at a musical event is required. It is recommended that students have a fine arts performance track, such as a solo instrument, voice proficiency, or drama.
Class Hours: 27 lab
An advanced course in the experience of listening, analyzing, and criticizing classical music performances in class and the community. Applied Music students, local musicians, and professional musicians perform and lecture. Students are expected to perform at a level close to that of an upper division student on a solo or vocal instrument. Required for Pre-Music and Music Core Program.

MUS 64 BEGINNING KEYBOARD SKILLS - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: MUS 1 with a grade of C or higher
Class Hours: 54 lab total
A laboratory course to build and apply beginning keyboard skills utilizing the basic concepts of the lecture course, MUS 2.

MUS 65 INTERMEDIATE KEYBOARD SKILLS - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: MUS 64 with a grade of C or higher
Class Hours: 54 lab total
A laboratory course to build and apply intermediate keyboard skills utilizing the basic concepts of the lecture course, MUS 3.

## MUS 66 ADVANCED-INTERMEDIATE KEYBOARD SKILLS 1 Unit <br> Grading: Pass/No Pass Option <br> Prerequisite: MUS 65 with a grade of C or higher <br> Class Hours: 54 lab total

A laboratory course to build and apply advanced-intermediate keyboard skills utilizing the basic concepts of the lecture course, MUS 4.

MUS 67 ADVANCED KEYBOARD SKILLS - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: MUS 66 with a grade of C or higher
Class Hours: 54 lab total
A laboratory course to build and apply advanced keyboard skills utilizing the basic concepts of the lecture course, MUS 5.

## 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.

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 SUSTAINABILITY 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 nonrecognized, 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 EuroAmerican 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.

## NHIS 105 NATURAL HISTORY OF THE SOUTHERN CASCADES 1 Unit (formerly GEOL 105) <br> 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 twoday overnight field trip.

## NATURAL RESOURCES

See AGNR for course listings

## 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 Learning Resource Center and the Tehama Campus.
Class Hours: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
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: OAS 10 with a grade of C or higher.
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 Learning Resource Center and the Tehama Campus.
Class Hours: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
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.

## OAS 12 EXCEL FOR WINDOWS - III - 1 Unit (formerly CIS 11, MIS 75) <br> Grading: Pass/No Pass Option

Advisory: OAS 11 with a grade of C or higher.
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 Learning Resource Center and the Tehama Campus.
Class Hours: 13.5 lecture/ 13.5 lab total (when offered in the Distance Education format, hours will total 54)
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 <br> Grading: Pass/No Pass Option

Advisory: ENGL 280 with a grade of C or higher 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 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 Learning Resources 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)
Grading: Pass/No Pass Option
Prerequisite: OAS 51 with a grade of C or higher
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 Learning Resources 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) <br> Grading: Pass/No Pass Option

Prerequisite: OAS 52 with a grade of C or higher
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 Learning Resources 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 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 Learning Resource 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: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
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.

## 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 Learning Resources Center and the Tehama Campus. Students taking the Internet format of this course must have access to the same version of the Microsoft Operating System and Office Suite being used in the course.
Class Hours: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
This course introduces word processing through using Microsoft WORD for Windows. 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: OAS 91 or OAS 51 with a grade of C or higher. 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 Learning Resources Center and the Tehama Campus. Students taking the Internet format of this course must have access to the same version of the Microsoft Operating System and Office Suite being used in the course.
Class Hours: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
This course introduces word processing through using Microsoft WORD for Windows. Microsoft WORD will be designed to expand and improve basic word processing skills to a higher level of proficiency through multi-media lecture/demonstration/discussion. 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: OAS 92 with a grade of C or higher
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 Learning Resources Center and the Tehama Campus. Students taking the Internet format of this course must have access to the same version of the Microsoft Operating System and Office Suite being used in the course.
Class Hours: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
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
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Learning Resources Center and the Tehama Campus. Students taking the Internet format of this course must have access to the same version of the Microsoft Operating System and Office Suite being used in the course.
Class Hours: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
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 110 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, digestive system, digestive, endocrine, special senses, urinary, male and female reproductive, obstetrics, radiology, diagnostic imaging, oncology and pharmacology. This course may be offered in a distance education format.

## OAS 112 MEDICAL CODING - 3 Units (formerly HEOC 112, MEDA 156, MEDA 156A)

Prerequisite: OAS 110 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 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: OAS 112 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 (when offered in the Distance Education format, hours will total 162)
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. This course may be offered in a distance education format.

## OAS 150 ELECTRONIC MEDICAL RECORDS - 3 Units (formerly MEDA 150B)

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 Learning Resource Center and the Tehama campus.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is designed to prepare students for entry-level positions with electronic records in a medical office. Topics covered are computerized systems for appointment scheduling and follow-up: claim forms and coding; patient and insurance billing, and medical practice financial management. This course may be offered in a distance education format.

## OAS 152 KEYBOARDING FOR SPEED AND ACCURACY - . 5 Unit (formerly OAS 268, OAS 268AD, BUSI 268AD) <br> 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 Learning Resource 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 offered in a distance education format.

## OAS 158 OFFICE PROCEDURES FOR ADMINISTRATIVE ASSISTANTS - 3 Units (formerly BUSI 158)

Advisory: ENGL 280 with a grade of C or higher 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 medical and office technology. This is an essential class for students wishing to work in any medical or general office position. Content includes: understanding the medical practice, the unique issues of working in a medical office, interacting with patients, dealing with insurance and finances, medical terminology and ethics, an overview of the billing and reimbursement process, scheduling appointments, and obtaining employment, office ethics, greetings, telephone techniques, working with others, mailing and filing procedures, appointment/calendaring employment testing, and career planning. This course may be offered in a distance education format.

## OAS 160 MEDICAL TRANSCRIPTION - 3 Units (formerly OAS 159/160, BUSI 159B)

Prerequisite: BUAD 166 and OAS 51 with a grade of C or higher
Corequisite: OAS 110 or previous completion of OAS 110 with a grade of $C$ or higher
Note: Class may require outside time using a computer with Internet access and appropriate software. Computer access is provided on campus at the Learning Resources 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)
A course designed to help the student reinforce and expand knowledge of medical vocabulary and to acquire medical transcription skills through the typing of medical notes, reports, and diagnostic case histories. Further experience in transcribing diagnostic imaging, oncology, cardiology, hematology, general surgery, plastic surgery, dentistry, orthopedics, neurology, psychiatry, urology, obstetrics, pediatrics, otorhinolaryngology, ophthalmology, respiratory,
gastroenterology, and pathology. This course may be offered in a distance education format.

## OAS 166 RECORDS MANAGEMENT - 2 Units <br> (formerly BUSI 163)

Class Hours: 27 lecture/27 lab total (when offered in the Distance Education format, hours will total 108)
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 (when offered in the Distance Education format, hours will total 108)
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. This course may be offered in a distance education format.

## 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 Learning Resource 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: ENGL 1A with a grade of C or higher 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 some of the major philosophical issues in the history of philosophy through the critical examination of primary texts. It will both explore what is special about the questions philosophers ask and consider the most famous answers philosophers have given 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 Option
Advisory: ENGL 1A with a grade of C or higher or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course critically examines both the concept of morality as well as a number of representative ethical theories, such as Kantianism, Utilitarianism, Contractarianism, Divine Command Theory and Virtue Ethics. It also introduces students to a range of moral and social
problems such as 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: ENGL 1A with a grade of C or higher 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. This course introduces principles of reasoning with emphasis on deductive logic. It will provide students with extensive experience in identifying a range of correct and incorrect argument forms. The course may include a treatment of inductive reasoning and fallacies. This course may be offered in a distance education format.

PHIL 14 MODERN WESTERN PHILOSOPHY - 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 Western Philosophy from the $16^{\text {th }}$ to the $18^{\text {th }}$ century, with emphasis on broad epistemological and metaphysical developments of empiricism and rationalism in philosophical thought Descartes to Kant. It may include approximate precursors and successors. 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 11 FUNDAMENTAL CONDITIONING - 1 Unit (formerly HPE 1AD)

## Grading: Pass/No Pass Option

Class Hours: 54 lab total
This course is designed for students who wish to assess and improve physical fitness levels and encourage a healthy attitude toward overall physical conditioning and fitness. Students receive instruction concerning the theories and practical activities involved in obtaining and maintaining an appropriate level of physical fitness, and through this process the students gain the ability to develop strategies and knowledge to make informed decisions for healthy lifestyle habits.

## PE 12A BEGINNING WEIGHT TRAINING AND FITNESS - 1 Unit (formerly PE 12, HPE 24AD)

Grading: Pass/No Pass Option
Class Hours: 54 lab total
This course is an introduction to weight training and fitness. It will include the safety aspects of successful weight training and techniques associated with a well-rounded beginning weight training program. This
class will focus on the introduction of basic core lifts primarily through the use of weight lifting machines and circuit training programs that target the major muscle groups and emphasize the connection between cardiovascular fitness and strength training

## PE 12B INTERMEDIATE WEIGHT TRAINING AND FITNESS 1 Unit

Grading: Pass/No Pass Option
Prerequisite: PE 12A with a grade of C or higher
Class Hours: 54 lab total
This course is for the intermediate level weight training and fitness student that has successfully passed PE 12A, Beginning Weight Training and Fitness. It will teach the intermediate level weight training and fitness student the safety issues and techniques involved in using free weight resistance training exercises. Emphasis will be on developing a workout program that includes the use of free weight (dumbbell and barbell), power lifting techniques, and Olympic lifts for total development of the various muscle groups. Through the use of cardiovascular exercises and resistance exercises the student will be able to develop a high level of whole body fitness.

PE 12C ADVANCED WEIGHT TRAINING AND FITNESS - 1 Unit Grading: Pass/No Pass Option
Prerequisite: PE 12B with a grade of C or higher
Class Hours: 54 lab total
This course is an advanced weight lifting and fitness class where the student sets his/her own goals and develops a program to meet their goals. This class will focus on the student's ability to generate, assess and apply an individual fitness program to meet individual fitness goals and encourage lifetime fitness.

PE 15 AEROBIC DANCE - 1 Unit (formerly HPE 53AD)
Grading: Pass/No Pass Option
Class Hours: 54 lab total
A complete physical conditioning program designed to increase cardiovascular efficiency through choreographed dances.

## PE 16 AEROBIC EXERCISE - 1 Unit (formerly HPE 63AD)

Grading: Pass/No Pass Option
Class Hours: 54 total activity
A complete physical conditioning program designed to increase cardiovascular efficiency through aerobic type exercises.

PE 17 YOGA - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 54 lab total
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.

## AQUATICS

## PE 30A BEGINNING SWIMMING - 1 Unit (formerly PE 30, HPE 40AD)

Grading: Pass/No Pass Option
Class Hours: 54 lab total
This class provides instruction in aquatic skills necessary for survival, efficiency in swimming, and conditioning in the aquatic environment.

PE 30B INTERMEDIATE SWIMMING - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: PE 30A with a grade of C or higher Class Hours: 54 lab total
This course is designed to help the intermediate swimmer improve cardiovascular endurance through swimming and to teach sound individual conditioning techniques. Instruction will emphasize freestyle and backstroke. Each student will progress toward becoming an endurance swimmer for enhanced fitness.

PE 30C ADVANCED SWIMMING - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 54 lab total
This course is designed to develop training skills, knowledge, strategy, and appreciation of competitive swimming for the advanced swimmer. Students that are preparing for competitive team, club, or triathlon training are encouraged to enroll in this course.

PE 31 AQUA AEROBICS - 1 Unit (formerly HPE 79AD)
Grading: Pass/No Pass Option
Class Hours: 54 total
Aqua aerobics is an activity/fitness class where the student will be exposed to basic aquatic aerobic exercises. Water is the perfect medium for providing natural resistance for toning, firming, and strengthening the whole body. Exercising in water provides the student an opportunity to gain higher levels of fitness while minimizing the harsh impact to the body and joints like land base exercises do. This class includes upright movement skills, and is not a swimming class.

PE 32 WATER POLO - 1 Unit (formerly HPE 44AB)
Grading: Pass/No Pass Option
Class Hours: 54 lab total
This course is designed to acquaint students with the sport of water polo. Emphasis on rules, individual skills, team play, and game strategy.

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. Students who are legally mandated to repeat this course can contact the Division for details on how to enroll.

PE 37 SPRINGBOARD DIVING - 1 Unit
Grading: Pass/No Pass Option
Class Hours: 54 lab total
This course is designed to present diving skills and techniques for both the one (1) meter and three (3) meter spring diving board, and criteria used to judge or score a dive.

## DANCE

For Dance courses, refer to DAN in the catalog

## RACQUET SPORTS

PE 51A BEGINNING TENNIS - 1 Unit
(formerly PE 51, HPE 35AD)
Grading: Pass/No Pass Option
Class Hours: 54 lab total
A course designed for the beginning tennis player. This course emphasizes the fundamentals, techniques and rules of the game of tennis.

## PE 51B INTERMEDIATE TENNIS - 1 Unit <br> Grading: Pass/No Pass Option <br> Prerequisite: PE 51A with a grade of C or higher

Class Hours: 54 lab total
This tennis course is designed for the player who has achieved a degree of stroke accuracy and dependability. This course will emphasize power, spin and controlled depth of shots. Footwork and game plan strategies will be developed along with first serve offensive shots.

PE 51C ADVANCED TENNIS - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: PE 51B with a grade of C or higher
Class Hours: 54 lab total
This course will help prepare the student for competitive tennis play. The course will take students with an intermediate level skill
development in all phases of the game of tennis and work to improve the power and consistency with which these skills are used. In addition to improved use of tennis skills the course will also focus on successful strategies of both singles and doubles play.

## INDIVIDUAL SPORTS AND TEAM SPORTS

PE 60 SELF-DEFENSE - 1 Unit (formerly HPE 2AD)
Grading: Pass/No Pass Option
Class Hours: 54 lab total
This course is designed to teach students techniques in self-defense. The student will acquire fundamental skills in stances, punches, blocks, kicks, and escape maneuvers.
PE 62 GOLF - 1 Unit (formerly HPE 32AD)
Grading: Pass/No Pass Option
Class Hours: 54 lab total
This course is designed to teach the fundamental skills and knowledge necessary to participate in the game of golf.

PE 69 FOOTBALL-1 Unit (formerly HPE 3AD)
Grading: Pass/No Pass Option
Class Hours: 54 lab total
This course is designed to teach the fundamental skills and knowledge necessary to participate in the game of football with a strong emphasis on team play.

## PE 70A BEGINNING VOLLEYBALL - 1 Unit (formerly PE 70, HPE 6AD)

Grading: Pass/No Pass Option
Class Hours: 54 lab total
An introduction to the game of volleyball with beginning skills and an understanding and appreciation for the game of volleyball. Demonstration, drills and practice will provide the student with the opportunity to develop basic skills. Rules, basic strategy, and team play will enhance the student's knowledge to continue this activity at a higher level.

PE 70B INTERMEDIATE VOLLEYBALL - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: PE 70A with a grade of C or higher
Class Hours: 54 lab total
Designed to improve player skills, techniques and knowledge at an intermediate level for the game of volleyball. Demonstration and drills/practice will provide the student with the opportunity for improving skill level. Intermediate skills, such as quick offense/attack will be demonstrated and rehearsed. Students will have the opportunity to evaluate and apply knowledge of "out-of-system" play.

PE 70C ADVANCED VOLLEYBALL - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: PE 70B with a grade of C or higher
Class Hours: 54 lab total
This course is designed to continue furthering a student's knowledge of the rules and strategies of volleyball as well as practicing the ability to perform volleyball skills. Higher level skills and strategies corresponding to the course objectives will be taught and practiced during this course. Demonstration, drills, practice, team play, and video analysis will provide the student with opportunities to improve their personal, as well as their team, skills. Advanced skills, such as slide hitting, multiple attack offense, and jump serving, will be demonstrated and rehearsed. Students will learn to evaluate and apply various offensive and defensive systems.

PE 71 SOFTBALL - 1 Unit (formerly HPE 5AD)
Grading: Pass/No Pass Option
Class Hours: 54 lab total
This course is designed to teach the fundamental skills and knowledge necessary to participate in the game of softball with a strong emphasis on team play.

## PE 72 BASEBALL - 1 Unit (formerly HPE 5AD) <br> Grading: Pass/No Pass Option <br> Class Hours: 54 lab total

This course is designed to teach the fundamental skills and knowledge necessary to participate in the game of baseball with a strong emphasis on team play.

## PE 73 TRACK \& FIELD TECHNIQUES - 1 Unit (formerly HPE 12AD)

Grading: Pass/No Pass Option
Class Hours: 54 lab total
This course is designed to teach the fundamental skills and knowledge necessary for track and field.
PE 74 SOCCER - 1 Unit (formerly HPE 41AD)
Grading: Pass/No Pass Option
Class Hours: 54 lab total
This course is designed to teach the fundamental skills and knowledge necessary for soccer.

## PE 75 BASKETBALL - 1 Unit (formerly HPE 4AD) <br> Grading: Pass/No Pass Option <br> Class Hours: 54 lab total

Designed to develop basic skills, 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 student's knowledge of the game of basketball.

## PHYSICAL EDUCATION - ATHLETICS

PEAT 5 INTERCOLLEGIATE FOOTBALL - 3 Units (formerly HPE 14AB)
Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability. This course is designed for the intercollegiate football athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 162-175 hours total
Football instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 6 THEORY OF FOOTBALL - 1 Unit (formerly HPE 9AB)

Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate football athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate football. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 7 INTERCOLLEGIATE VOLLEYBALL - 3 Units (formerly HPE 61AB)

Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability. This course is designed for the intercollegiate volleyball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 162-175 hours total
Volleyball instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 8 THEORY OF VOLLEYBALL - 1 Unit (formerly HPE 52AB)

## Grading: Pass/No Pass Option

Note: This course is designed for the intercollegiate volleyball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate volleyball. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 9 INTERCOLLEGIATE CROSS COUNTRY - 3 Units (formerly HPE 29AB)

Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability. This course is designed for the intercollegiate cross-country athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 162-175 hours total
Cross country instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 10 THEORY OF CROSS COUNTRY - 1 Unit (formerly HPE 30AB)

Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate cross country athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory and strategies of cross country. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 11 INTERCOLLEGIATE BASKETBALL - 3 Units (formerly HPE 15AB)

## Grading: Pass/No Pass Option

Note: Tryouts may be required to determine performance capability. This course is designed for the intercollegiate basketball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 162-175 lab hours total
Basketball instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 12 THEORY OF BASKETBALL - 1 Unit (formerly HPE 13AB)

Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate basketball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate basketball. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 13 INTERCOLLEGIATE SOFTBALL - 3 Units (formerly HPE 62AB)

Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability. This course is designed for the intercollegiate softball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 162-175 hours total
Softball instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 14 THEORY OF SOFTBALL - 1 Unit (formerly HPE 42AB)

Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate softball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate softball. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 15 INTERCOLLEGIATE BASEBALL - 3 Units (formerly HPE 16AB)

Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability. This course is designed for the intercollegiate baseball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 162-175 hours total
Baseball instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

PEAT 16 THEORY OF BASEBALL - 1 Unit (formerly HPE 10AB)
Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate baseball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate baseball. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## 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.
This course is designed for the intercollegiate track and field athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 162-175 hours total
Track and field instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 18 THEORY OF TRACK AND FIELD - 1 Unit (formerly HPE 28AB)

Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate track and field athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
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. This course is designed for the intercollegiate tennis athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 162-175 hours total
Tennis instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

PEAT 20 THEORY OF TENNIS - 1 Unit (formerly HPE 68AB)
Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate tennis athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate tennis. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 23 INTERCOLLEGIATE SOCCER - 3 Units (formerly HPE 71AB) <br> Grading: Pass/No Pass Option

Note: Tryouts may be required to determine performance capability. This course is designed for the intercollegiate soccer athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 162-175 hours total
Soccer instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

PEAT 24 THEORY OF SOCCER - 1 Unit (formerly HPE 70AB)
Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate soccer athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 9 lecture/ 27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate soccer. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## 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. This course is designed for the intercollegiate swimming and diving athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 162-175 hours total
Swimming and diving instruction, practice and competition at the
intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 26 THEORY OF SWIMMING AND DIVING - 1 Unit (formerly HPE 83AB)

Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate swimming and diving athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 9 lecture/27 activity total
A course designed to teach the rules, theory, and strategies of intercollegiate swimming and diving. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 29 INTERCOLLEGIATE WRESTLING - 3 Units

Grading: Pass/No Pass Option
Note: Tryouts may be required to determine performance capability. This course is designed for the intercollegiate wrestler. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 162-175 lab total
Wrestling instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 30 THEORY OF WRESTLING - 1 Unit

Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate wrestler. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 9 lecture/27 lab total
A course designed to teach the rules, theory, and strategies of intercollegiate wrestling. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

PEAT 41 OFF-SEASON FOOTBALL TRAINING - 1-3 Units
Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate football athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 54-162 lab total
This is an intercollegiate class designed for the development of the intercollegiate football player during the off-season of competition. Through the use of specialized strength/conditioning programs, football specific drills and techniques the student will be provided the opportunity to increase their strength, endurance and football abilities/skills to prepare them for the intercollegiate football season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

PEAT 42 OFF-SEASON SOCCER TRAINING - 1-3 Units
Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate soccer athlete.
Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 54-162 lab total
This is an intercollegiate class designed for the development of the soccer athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of soccer that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

PEAT 43 OFF-SEASON VOLLEYBALL TRAINING - 1-3 Units
Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate volleyball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 54-162 lab total
This is an intercollegiate class designed for the development of the volleyball athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of volleyball that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 44 OFF-SEASON WRESTLING TRAINING - 1-3 Units

 Grading: Pass/No Pass OptionNote: This course is designed for the intercollegiate wrestler. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 54-162 lab total
This is an intercollegiate class designed for the development of the wrestler during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of wrestling that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

PEAT 45 OFF-SEASON BASKETBALL TRAINING - 1-3 Units
Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate basketball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 54-162 lab total
This is an intercollegiate class designed for the development of the basketball athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of basketball that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 46 OFF-SEASON BASEBALL TRAINING - 1-3 Units

Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate baseball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 54-162 lab total
This is an intercollegiate class designed for the development of the baseball athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of baseball that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 47 OFF-SEASON SOFTBALL TRAINING - 1-3 Units

Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate softball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 54-162 lab total
This is an intercollegiate class designed for the development of the softball athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and
techniques for the sport of softball that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 48 OFF-SEASON SWIMMING AND DIVING TRAINING -1-3 Units

Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate swimmer and diver. Although this class is designed for the intercollegiate athlete, it is open to all individuals.

## Class Hours: 54-162 lab total

This is an intercollegiate class designed for the development of the swimming and diving athlete during the off season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of swimming and diving that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## PEAT 49 OFF-SEASON TENNIS TRAINING - 1-3 Units

Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate tennis athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 54-162 lab total
This is an intercollegiate class designed for the development of the tennis athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of tennis that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

PEAT 50 OFF-SEASON TRACK AND FIELD TRAINING - 1-3 Units Grading: Pass/No Pass Option
Note: This course is designed for the intercollegiate track and field athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.
Class Hours: 54-162 lab total
This is an intercollegiate class designed for the development of the track \& field athlete during the off season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of track \& field that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete's eligibility for the particular sport.

## 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.

## PHYSICAL SCIENCE (PHSC)

(see also Earth Science - ESCI)
PHSC 1 PHYSICAL SCIENCE SURVEY - 4 Units
Grading: Pass/No Pass Option
Advisory: MATH 101 with a grade of C or higher, 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: MATH 102 with a grade of C or higher 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 <br> Grading: Pass/No Pass Option <br> Prerequisite: PHYS 2A with a grade of C or higher <br> 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: MATH 3A with a grade of $C$ or higher, or Math Placement Level 6 or higher
Corequisite: MATH 3B or previous completion of 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: MATH 3B with a grade of $C$ or higher or Math Placement Level 7; and PHYS 4A with a grade of C or higher
Corequisite: MATH 4A, or previous completion of 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, Ohm's Law, D-C circuits, Magnetism, Biot-Savart Law, Amperes Law, Capacitance, inductance and RC circuits.

## PHYS 4C PHYSICS (HEAT, WAVES, OPTICS, AND MODERN PHYSICS) - 4 Units

Prerequisite: PHYS 4B with a grade of C or higher, and MATH 4A with a grade of C or higher or Math Placement Level 7
Corequisite: MATH 4B or previous completion of MATH 4B with a grade of C or higher
Class Hours: 54 lecture/54 lab total
The third in a three-course sequence, this course covers heat and thermodynamics, general properties of waves, electromagnetic waves, reflection and refraction, interference and diffraction, and selected topics in modern physics.

## PHYSIOLOGY (PHY)

PHY 1 PHYSIOLOGY- 5 Units (formerly PHY 1/PHY 1L)
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: ENGL 1A with a grade of C or higher, 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: ENGL 190 with a grade of C or higher or English Placement Level 6 or higher, or ESL 138 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 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 US3 ). 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: ENGL 1A with a grade of C or higher, 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: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher; or ESL 138 with a grade of C or higher; and POLS 2 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 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: ENGL 190 with a grade of C or higher 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, social-behavioral, psychodynamic, humanistic, cultural, and evolutionary perspectives. Topics include research methods, the nervous system, perception, learning, thinking, memory, human development, social behavior, emotions, motivation, personality, abnormal behavior, and psychotherapy. This course may be offered in a distance education format.

## PSYC 5 HUMAN SEXUALITY- 3 Units (formerly PHY 5)

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 PSYCHOLOGY OF PERSONAL AND SOCIAL ADJUSTMENT - 3 Units

Advisory: ENGL 190 with a grade of C or higher, 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 overview of psychology as applied to modern life. It focuses on using psychological perspectives and concepts toward understanding one's self and development, relating to others, and coping with everyday challenges. Topics include personality, stress, health, emotions, interpersonal relations, gender, sexuality, mental illness, and psychotherapy. This course may be offered in a distance education format.

## PSYC 15 SOCIAL PSYCHOLOGY - 3 Units

Grading: Pass/No Pass Option
Advisory: PSYC 1A and/or SOC 1 with a grade of C or higher; and ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher, or ESL 138 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 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; group think 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: PSYC 1A with a grade of C or higher; and ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher, or ESL 138 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 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: PSYC 1A with a grade of C or higher; and ENGL 1A with a grade of C or higher, 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: PSYC 1A with a grade of C or higher; and ENGL 280 with a grade of C or higher, or English Placement Level 5 or higher, or ESL 138 with a grade of C or higher
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: MATH 14 with a grade of C or higher and PSYC 1A with a grade of C or higher
Advisory: ENGL 1A with a grade of $C$ or higher, 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 subdisciplines of psychology.

## PSYC 41 CULTURALISOCIAL CONTEXT OF CHILDHOOD 3 Units

Advisory: ENGL 190 with a grade of C or higher, 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 examines child development with a focus on the effects of cultural and social factors. These factors include those such the socialization process and cultural influences such as ethnic identity, socioeconomic status, gender roles, family, peers, faith, and community. Significant references highlight the experiences of children and their families from several different historically underrepresented 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: ENGL 190 with a grade of C or higher 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 explores human memory, learning, and thinking processes. Topics include: how memories are formed and retrieved, how learning and memory can be improved, factors that influence our abilities to learn and remember, learning habits and behaviors through conditioning, typical and atypical memory flaws, including disorders such as post-traumatic stress disorder, Alzheimer's disease, and amnesia. This course may be offered in a distance education format.

## 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)

Limitation on Enrollment: Students must be enrolled in the nursing program
Corequisite: Students must be concurrently enrolled in REGN 1
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.
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 such as medication preparation and administration, urinary catheterization, and sterile technique. Application of the theory presented in the corequisite 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 I - 6.5 Units (formerly REGN 70)
Prerequisite: REGN 1 and REGN 2 with a grade of $C$ or higher
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 I - 4.5 Units (formerly REGN 71)

Prerequisite: REGN 1 and REGN 2 with a grade of $C$ or higher Corequisite: 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: REGN 1 and REGN 2 with a grade of $C$ or higher Corequisite: 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 FAMILY/MATERNALCHILD NURSING AND MEDICAL SURGICAL NURSING II - 7 Units (formerly REGN 90) <br> Prerequisite: REGN 10, REGN 11 and REGN 12 with a grade of C or higher <br> Corequisite: REGN 21 <br> 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 MATERNAL-CHILD NURSING AND MEDICAL SURGICAL NURSING II (NON-DEGREE) - 4 Units (formerly REGN 90XIREGN 91X)

Corequisite: 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 complete a physical examination and pass required elements, submit proof of required immunizations, 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 34X. This course is one of two co-requisite courses that make up the third semester of the Non Degree Registered Nursing 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, legal-ethical issues and advocacy.

## REGN 21 CLINICAL CONCEPTS OF FAMILY/MATERNAL-CHILD AND MEDICAL SURGICAL NURSING II - 5 Units (formerly REGN 91)

Prerequisite: REGN 10, REGN 11 and REGN 12 with a grade of $C$ or higher
Corequisite: 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. 1. Students must be enrolled in REGN 20 and have negative TB skin test (PPD) or chest x-ray, required immunizations and current CPR Health Care Provider card good for the entire semester before they are permitted in the clinical area. 2. Uniforms and supplies
according to the Student Handbook: RN Student Handbook 3. Books purchased in the previous semesters of the I program. 4. Email account and Internet access, at home or at college library, LRC. 5. Internet access to online learning system:
http://online.shastacollege.edu/ 6. Passing and paying for drug testing and background checks, physical examination, immunizations and updates, according to program policy.
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 (NONDEGREE) - 4 Units (formerly REGN 90XIREGN 91X) <br> Corequisite: REGN 20X

Limitation on Enrollment: Students must be enrolled in the 30-unit option program
Note: This is the course for the LVN 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 total
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 nondegree 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, COMMUNITY-BASED NURSING \& MEDICAL SURGICAL NURSING III - 6 Units (formerly REGN 30/31; 80/81) <br> Prerequisite: REGN 20 and REGN 21 <br> 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, COMMUNITY-BASED NURSING \& MEDICAL SURGICAL NURSING III (NON-DEGREE) - 6 Units (formerly REGN 30X/31X; 80XI81X)

Prerequisite: REGN 20X and REGN 21X with a grade of $C$ or higher Corequisite: REGN 34X
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 33X 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 communitybased 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 oncampus 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 - <br> 6 Units (formerly REGN 32, REGN 82)

Prerequisite: REGN 20 and REGN 21 with a grade of C or higher Corequisite: 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: REGN 20X and REGN 21X with a grade of $C$ or higher Corequisite: 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.

## 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. This course may be offered in a distance education format.

## SDEV 302 GED TEST PREPARATION - 0 Units

Advisory: ENGL 260 with a grade of C or higher 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. This course may be offered in a distance education format.

## SOCIOLOGY (SOC)

## SOC 1 INTRO TO SOCIOLOGY - 3 Units

Grading: Pass/No Pass Option
Advisory: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher, or ESL 138 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 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: ENGL 190 with a grade of $C$ or higher, or English Placement Level 6 or higher, or ESL 138 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 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: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher, or ESL 138 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 examines the central role media plays in daily life. Starting from a micro sociological 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: ENGL 280 with a grade of C or higher, or English Placement Level 5 or higher, or ESL 138 with a grade of $C$ or higher
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: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher or ESL 138 with a grade of $C$ 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 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: ENGL 190 with a grade of C or higher, or English Placement Level 6 or higher, or ESL 138 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 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: ENGL 280 with a grade of $C$ or higher, or English Placement Level 5 or higher, or ESL 138 with a grade of C or higher
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 education 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: ENGL 280 with a grade of C or higher, 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 Spanishspeaking 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: SPAN 1 with a grade of C or higher, or Foreign Language Placement Level 2 or higher
Advisory: ENGL 280 with a grade of C or higher, 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: SPAN 2 with a grade of C or higher, or Foreign Language Placement Level 3 or higher
Advisory: ENGL 280 with a grade of C or higher, 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 Spanishspeaking countries.

SPAN 4 INTERMEDIATE SPANISH - 3 Units
Grading: Pass/No Pass Option
Prerequisite: SPAN 3 with a grade of C or higher, or Foreign Language Placement Level 4
Advisory: ENGL 280 with a grade of C or higher, 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: SPAN 2 with a grade of C or higher, or Foreign Language Placement Level 3
Advisory: ENGL 280 with a grade of C or higher, 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 OptionPrerequisite: SPAN 3 with a grade of C or higher, or Foreign Language Placement Level 4
Advisory: ENGL 280 with a grade of C or higher, 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 UnitsGrading: Pass/No Pass Option
Advisory: ENGL 280 with a grade of C or higher, 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: ENGL 280 with a grade of C or higher, 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 (when offered in the Distance Education format hours will total 54)
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. This course may be offered in a distance education format.

## 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 LAB/SUPERVISED TUTORING 0 Units (formerly GS 310)

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, theatre history, playwrights, practitioners, genres, production methods, dramatic structure, performance style, plays, terminology, history, criticism, and stagecraft. Students will develop an appreciation for the theatre arts through lectures, play reading, viewing, critiquing, and participating in college productions. This course fulfills the Arts requirement for General Ed Transfer.

## THTR 5 20TH CENTURY THEATRE - 3 Units

Advisory: ENGL 190 with a grade of C or higher, 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 HISTORY OF WORLD THEATRE I-3 Units Class Hours: 54 lecture total

This is a survey course of Theatre History emphasizing cultural, historic, and international theatre from its origins through the 17th Century. It includes exploration of experience, imagination and expression of dramatic art forms throughout the world. 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 HISTORY OF WORLD THEATRE II - 3 Units
Class Hours: 54 lecture total
This is a survey course of Theatre History emphasizing cultural, historic, and contemporary theatre from 1700 to the present. It includes exploration of experience, imagination and expression in dramatic art forms throughout the world. 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 I-2 Units

Class Hours: 18 lecture/54 lab
This course prepares a student to apply basic acting theory to performance and develops the skills of interpretation of drama through acting. Special attention is paid to skills for performance: memorization, stage movement, vocal production, and interpretation of text.

## THTR 13 ACTING II - 2 Units

Prerequisite: THTR 12 with a grade of C or higher Class Hours: 18 lecture/54 lab total
This course prepares a student to apply basic acting theory to performance and develops the skills of interpretation of drama through acting. Special attention is paid to skills for performance: memorization, stage movement, vocal production, and interpretation of text.

THTR 16 ACTING LAB - 1 Unit
Grading: Pass/No Pass Option
Prerequisite: THTR 12 with a grade of C or higher Class Hours: 54 lab total
This laboratory course follows Acting I and Acting II and continues the exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process through character analysis, monologues, and scenes.

## THTR 23 MAINSTAGE PRODUCTION I-1-4 Units (formerly THTR 23AD)

## Class Hours: 54-216 lab total

In this fundamental course students rehearse, prepare and perform a Mainstage play. Play selections vary each time this course is taught. Production activities may include acting, stage management, stage operations, costuming, stagecraft and front of house operations. The course is required for theatre majors, non-majors are welcome. Students may enroll more than once for this course until reaching the maximum number of 4 total units.

## THTR 26 MAINSTAGE PRODUCTION II - 1-6 Units (formerly THTR 26AD)

## Grading: Pass/No Pass Option

Class Hours: 54-324 lab total
A course that focuses on the rehearsal and performance of a major play or musical. Activities may include acting, stage management, backstage operations, costuming, stagecraft and front of house operations. Play selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 6 total units.

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.

## THTR 30 STAGECRAFT - 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, the design, construction and painting of scenery, hanging and operating lighting instruments, basic stage management and understanding backstage operations. Students will learn how to interpret theatrical construction diagrams, floor plans for stage sets, and light plots.

## THTR 31 INTRODUCTION TO THEATRICAL DESIGN - 3 Units (formerly THTR 35)

Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course focuses on the theories of stage design, stage management and implementation of the technical elements of a theatrical production, including scenic design, costumes, makeup, lighting and stage properties. Students will survey theatrical equipment and analyze construction techniques.

## 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, application, facial modeling, three-dimensional techniques, false hair, character 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.

THTR 38 MAKEUP LAB-1 Unit
Grading: Pass/No Pass Option
Prerequisite: THTR 34 with a grade of $C$ or higher
Class Hours: 54 lab total
This lab course is designed to develop the student's skills introduced in Theatre 34, Makeup. Emphasis will be given to corrective character analysis, makeup selection and application techniques. 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.

## THTR 41 THEATRE LABORATORY - 1-4 Units (formerly THTR 41AD)

Grading: Pass/No Pass Option
Class Hours: 54-216 lab hours total
A laboratory course in which the student will receive supervised practical experience and technical 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. Play selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 4 total units.

## THTR 42 TECHNICAL STAGE PRODUCTION - 1-4 Units (formerly THTR 42AD)

## Grading: Pass/No Pass Option

Class Hours: 54-216 lab total
A laboratory course in which the student will participate in one or more of the following technical production areas: scenery construction, set
decorations, lighting, sound, costumes, properties, makeup, stage management and publicity. The course will focus on the technical requirements for creating public performances and entertainments. Entertainment selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 4 total units.

## THTR 50 REHEARSAL AND PERFORMANCE - 1-3 Units (formerly THTR 50AD)

## Grading: Pass/No Pass Option

## Class Hours: 54-162 lab total

A rehearsal and performance course designed to provide experience in creating public performances, including but not limited to improvisation, dance, music, musical reviews and concerts. Entertainment selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 3 total units.

## THTR 51 STAGE PRODUCTION-CHOREOGRAPHY - 1-3 Units (formerly THTR 51AD)

## Grading: Pass/No Pass Option

Class Hours: 54-162 lab total
A course that teaches basic stage movement and dance for a stage production, including but not limited to dance, music and concerts. Class projects will include participation in choreography in class or in stage productions. Play selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 3 total units.

## THTR 52 STAGE PRODUCTION - MUSIC - 1-3 Units (formerly THTR 52AD) <br> Grading: Pass/No Pass Option

Class Hours: 54-162 lab total
A course that teaches the use of vocal and instrumental music for a stage production, including but not limited to dance, music, theatre and concerts. Class projects will include participation in classroom activities and/or productions. Play selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 3 total units.

## THTR 60 SPECIAL PROJECTS-PRODUCTION - 1-2 Units (formerly THTR 60AD) <br> Class Hours: 54-108 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. Students may enroll more than once for this course until reaching the maximum number of 2 total units.

## THTR 70 REPERTORY THEATRE I-1, 2, 3, 4, 6, 8, 10 Units

Class Hours: 54-540 lab total ( 54 hours per unit)
In this course students will rehearse and perform one or more 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. Class projects and rehearsal activities may include choreography and music elements. Students may enroll more than once for this course until reaching the maximum number of 10 total units.

## THTR 74 REPERTORY THEATRE - TECHNICAL - <br> 1, 2, 3, 4, 6, or 8 Units <br> Class Hours: 54-432 lab total ( 54 hours per unit)

A laboratory course in which students will develop work experience and training in technical Repertory Theatre methods. 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. Play selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 8 total units.

## THTR 81 PLAYWRITING AND SCRIPT ANALYSIS - 3 Units

Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total
An in-depth 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 and analyzing motivated characters. 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.

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.

## THTR 153 COMMUNITY DRAMA - 1-4 Units

Grading: Pass/No Pass Option
Class Hours: 54-216 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. Students may enroll more than once for this course until reaching the maximum number of 4 total units as the learning experience varies each time the course is offered due to the selected performance.

## THTR 301 APPLIED THEATRE TECHNIQUES-TECHNICAL 0 Units (formerly THTR 301AD) <br> 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: VOCN 160 with a grade of C or higher
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: VOCN 161 with a grade of C or higher
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 long-term care setting. Assignments include clinical experience in the acute care, long-term care, home-care setting, medical, surgical, obstetrics (including nursery), pediatrics, acute progressive care, and outpatient clinics.

## WATER TREATMENT TECHNOLOGY (WTT)

## WTT 94 WATER TREATMENT TECHNOLOGY WORKSITE

 LEARNING - 1-8 UnitsLimitation 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.

## WTT 177 INTRODUCTION TO WASTEWATER TREATMENT 3 Units (formerly NR 177) <br> 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) <br> Grading: Pass/No Pass Option <br> 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: WTT 180 with a grade of C or higher
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: WTT 180 with a grade of C or higher
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 (formerly NR 186 and NR 182)
Grading: Pass/No Pass Option
Advisory: WTT 177 or WTT 183 with a grade of C or higher
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 higherlevel 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: 27 lecture/81 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: WELD 70 or WELD 170 or AGMA 44 with a grade of C or higher 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: 27 lecture/81 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 simulates on-the-job welding situations.

## WELD 94 WORKSITE LEARNING FOR WELDING TECHNOLOGY

 - 1-8 UnitsLimitation 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.

## WELD 118 BLUEPRINT AND SPECIFICATION READING (MECHANICAL) - 2 Units (formerly ENGR 118)

## 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.

## 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: 27 lecture/81 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: WELD 170 with a grade of $C$ or higher 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: 27 lecture/81 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 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: 27 lecture/81 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: 27 lecture/81 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: 27 lecture/81 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: WELD 170 with a grade of $C$ or higher 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. 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: 27 lecture/81 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 - 1.5 Unit
Corequisite: WELD 171 or previous completion of WELD 171 with a grade of $C$ or higher or have 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: 81 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.

## WELD 183 ADVANCED ARC WELDING SPECIALTY LAB -

 1.5 UnitPrerequisite: WELD 182, 184, 186, 188, with a grade of C or higher 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. 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: 81 lab total
An advanced course designed to prepare students to pass structural steel certification in vertical and overhead positions. Students can obtain certifications in both the SMAW (Shielded Metal Arc Welding), FCAW (Flux Cored Arc Welding) GTAW (Gas Tungsten Arc Welding) and Pipe Welding. The goal of this class is to pass the AWS D1.1, ASME or API Welding Qualification tests. Strict adherence to the testing procedures will be followed. Completion of the class does not guarantee certification unless welding procedure qualification tests are passed.

WELD 184 ADVANCED GTAW (TIG) WELDING - 1.5 Unit
Corequisite: WELD 175 or previous completion of WELD 175 with a grade of C or higher or have 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. 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: 81 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 TIG welder.

WELD 186 ADVANCED PIPE WELDING - 2 Units
Corequisite: WELD 178 or previous completion of WELD 178 with a grade of C or higher or have 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. 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.

WELD 188 ADVANCED GMAW (MIG) WELDING - 1.5 Unit
Corequisite: WELD 174 or WELD 176 or previous completion of WELD 174 or WELD 176 with a grade of C or higher or have equal trade welding experience.
Note: Student 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. Practice is needed to master skills to advance to the next level of employment.
Class Hours: 81 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.

## 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.

## ZOOLOGY (ZOOL)

ZOOL 1 GENERAL ZOOLOGY - 4 Units
Prerequisite: MATH 102 with a grade of C or higher 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: 9 lecture/27 lab 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: 9 lecture/27 lab
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 55765). 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: 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 college-operated 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 Collegerecognized 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.
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 (AP 5520), 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
Changes pending to Board PolicylAdministrative Procedure. Refer to the website for the most current version.
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

Changes pending to Board PolicylAdministrative Procedure. Refer to the website for the most current version.

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 10/09/13) 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.

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.

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 or other officials so designated by the Superintendent/ President 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.
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 or other officials so designated by the Superintendent/ President 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 the Vice President of Student Services and the Superintendent/ President will be notified immediately. 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 shal 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.

In accordance with the Jeanne Clery Act, the District will disclose the results of any disciplinary proceeding conducted by the District against a student who is the alleged perpetrator of any crime of violence or a non-forcible sex offense to:

- The alleged victim; or
- The alleged victim's next of kin, if the victim is deceased.


## 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 (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;
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;
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 Trustees 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 college-level 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 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. The student shall be entitled to representation, by a person of his/her choice, other than legal counsel, at all informal compliant 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, including sex discrimination as prohibited by Title IX of the Higher Education Amendments of 1972. 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 Board Policy and Administrative Procedure 3430 - Prohibition of Unlawful Discrimination or Harassment, 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:
shastacollegeboardpolicies.edu

## 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 5520-Student 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.

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 (CСССО) at:
CCCComplaintsForm.edu.
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: shastacollegeboardpolicies.edu

## 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 shastacollegebookstore.

## 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!

## Service Area Outcomes

1. At least $85 \%$ of all students, staff and faculty will be satisfied with operations in the Career Services and Student Employment Department.
2. Employment and Career Services will partner with faculty, students, and community members including local employers to promote career and employment opportunities and preparation.

## Student Support Learning Outcomes

1. Based on an in-person presentation, students will be able to list two resources provided by the Career and Employment Center.

## Child Care Services <br> 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 shastacollegechildcare

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

## Student Health and Wellness Office

The office is located in Room 2020 in the Campus Center. Confidential services are available to Shasta College students who have paid the semester health fee (handled at registration) and are registered at the time of service in creditbearing courses for the current semester. You must present a government issued photo ID and your student ID number as eligibility will be verified with each visit. The office is open Monday thru Friday during the Spring and Fall semesters from 8:00 a.m. - 12:00 noon and from 1:00 p.m. - 4:00 p.m. Summer semester office hours, days, and services will vary. Services offered: first aid for on-campus accidents or injuries, TB testing, registered nurse consultation, health education, blood pressure checks, vision and hearing screening, cholesterol screening (nominal fee-call for details), smoking cessation, student accident reports, and brief / limited clinical (psychological) counseling. We also provide resources for reproductive health care. Physician consultations are available for the initial diagnosis and treatment of short-term illness and academic program / uncomplicated employment physicals. Physician services are not available during the summer semester. PLEASE NOTE: The Student Health \& Wellness office is not a comprehensive health care provider and is not structured to address all the healthcare needs of District students. It is not the intention, nor contained in the scope of practice, of the healthcare professionals in this office to be identified as primary healthcare providers. Medical (physician) services are contracted and limited. Hours and / or days of service are subject to change. There may also be times when the College Nurse and / or Psychological Counselor are out of the office, or off campus, during regular office hours. Please call (530) 2427580 for appointment availability. For more information, please visit our website at www.shastacollege.edu/wellness.

Remember, Shasta College is a Smoking Restricted campus. Smoking is only allowed in designated areas. Please visit our website, www.shastacollege.edu/wellness, for the locations of designated areas. Spitting of chew tobacco in classrooms (into cups, trashcans, etc.) is also prohibited. Willful non-compliance is a violation of college policy and the Student Code of Conduct.

## 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 shastacollegelibrary.

## 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 opportunities both on and off campus. Job listings are also posted on the Student Employment website: shastacollegejobboard. Computers, printers and fax 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.

Service Area Outcomes

1. At least $85 \%$ of all students, staff and faculty will be satisfied with operations in the Career Services and Student Employment Department.
2. Employment and Career Services will partner with faculty, students, and community members including local employers to promote career and employment opportunities and preparation.

## Student Support Learning Outcome

1. Based on an in-person presentation, students will be able to list two resources provided by the Career and Employment Center.

## 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 stop by Room 126.

## Student Support Learning Outcomes

1. Students utilizing the Transfer Center will report that they were satisfied with the services that they received.
2. As a result of participating in transfer services and activities, students will report an increased awareness of the transfer requirements and processes.
3. The Transfer Center will increase the number of students pursuing Associate Degrees for Transfer by expanding outreach and promotion of these degrees as they become available.

## 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 to Kids CalWORKs

The Shasta College CalWORKs Program serves students who are referred from the Shasta, Tehama or Trinity Counties Social Services' CalWORKs Programs. Eligible students are those receiving the adult portion of TANF (Temporary Assistance to Needy Family) cash aid. CalWORKs students receive specialized counseling services. Continuing CalWORKs students receive specialized support regarding academic progress and maintaining
eligibility for priority registration. Shasta College CalWORKs acts as an additional connection between CalWORKs students and their County Worker. Support services for CalWORKs students may include school related books and supplies not supported by the County. In addition, CalWORKs students have priority enrollment status for the on-campus Early Head Start and Head Start Programs.

CalWORKs Work Study is a resources for CalWORKs students to meet their required welfare-to-work hours while going to school. Wages earned while enrolled in the CalWORKs Work Study program are exempt from the CalWORKs student's cash aid grant. In addition, the CalWORKs employment program provides assistance with job readiness, resume development and job search resources.

Students who are receiving the adult portion of TANF cash aid or are considering applying for cash aid can contact the Shasta College CalWORKs office for more information at (530) 242-7627 or stop by the Shasta College CalWORKs office at 1400 Market Street (across the street from the County CalWORKs office), Room 8116, Redding. Monday - Friday, 7:30A-4:30P (closed Fridays in June and July).

## Student Learning Outcomes:

1. Students will report awareness of eligibility for CalWORKs priority registration.
2. Students will learn to utilize CalWORKs priority registration.

## 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 full-time 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) 2427540 or stop by the EOPS/CARE Office in the Student Center, Room 2005.

## Student Support Learning Outcomes

1. Students will demonstrate knowledge of the CARE resources available.
2. Students will demonstrate the value of CARE support services by increased retention, graduation, and transfer rates.

## 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, call (530) 242-7790 or stop by our office located in the Student Center, Room 2005.

## Service Area Outcome

1. Counselors will develop an Education Contract specifying academic and vocational goals, steps to completing those goals, and relevant services appropriate to their strengths and limitations.

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.

## DSPS (continued):

## Student Support Learning Outcomes

1. Students will identify individual educational limitations and successfully access appropriate disability accommodations.
2. Students will utilize appropriate disability management strategies.

## 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 stop by to the EOPS/CARE Office in the Student Center, Room 2005.

Student Support Learning Outcomes

1. Students will be able to identify, locate and utilize the resources and services needed to overcome educational and/or economic disadvantages to reach their academic goals.
2. Students will demonstrate that utilization of EOPS programs and services is a valuable aid for their college success.

## Gateway to College

The Shasta College Gateway to College program is a dual enrollment program for high school students who are significantly behind in credits and unlikely to graduate. Students who are chosen for participation in the Gateway program have an opportunity to simultaneously earn credit toward their high school diploma and a college degree or certificate through classes taken on the college campus. For more information, please contact the Program Director at (530) 242-7585.

## SCI*FI (Shasta College Inspiring and Fostering Independence)

SCI*FI is an educational support program for students who are current or former foster youth. Weekly workshops, academic support, and individual mentoring help students succeed in their coursework and also develop the skills needed to foster a stable transition into independence. A study lab is available in Room 2153. The counselor's office for SCI*FI is Room 2158, phone (530) 2427549. Additional information is available at SCI*FI.

## TRiO Programs

Educational Talent Search (ETS)
Student Support Services (SSS)
Upward Bound (UB)
The TRiO Talent Search Program identifies and assists 8th through 12th grade students from educationally disadvantaged backgrounds who have the potential to succeed in higher education. The program provides academic, career, and financial counseling to its participants and encourages them to graduate from high school and continue their education at a postsecondary institution of their choice. The program serves 500 students in Shasta and Trinity counties. For more information, please contact the Project Director at (530) 242-7691.

## Student Area Outcomes

1. Seniors served by the TRiO Talent Search program during the program year will graduate with a regular secondary school diploma in the standard number of years.
2. Students served by the TRiO Talent Search program will complete a rigorous program of study.
3. Seniors who participate in the TRiO Talent Search program and graduate with a regular high school diploma will enroll in an institution of higher education by the fall term immediately following high school.
4. Students served by the TRiO Talent Search program will have opportunities for exposure to college campuses whereby they will learn about college programs, services, and facilities, and become better prepared to make decisions regarding their continuing education.

TRiO Student Support Services is a federally funded program for eligible full-time students who are preparing to transfer to a four-year university to earn a bachelor's degree. TRiO-SSS provides support services such as tutoring, counseling, lending library, calculator loans, financial literacy workshops, cultural and social activities, university tours, and transfer assistance. For additional information on SSS, please visit room 2070 in the Student Center or call (530) 242-7690.

## Student Area Outcomes

1. First-year students will state an educational goal and identify potential transfer institutions.
2. Students will have access to counseling and support services leading to graduation and/or transfer.
3. Students will persist through the program and meet their educational goals.
4. Students will complete their Free Application for Federal Student Aid (FAFSA), online college application and scholarship application(s).

TRiO Upward Bound Program 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 Enterprise and Central Valley High Schools. For more information, please contact the Project Director at (530) 242-7698.

## Student Area Outcomes

1. Students will understand their options for post-secondary education and requirements.
2. Students will have access to field trips and workshops that will allow for a greater understanding of and exposure to postsecondary education.
3. Students will understand the financial aid process and funding opportunities.
4. Senior students will complete a college admissions application, Free Application for Federal Student Aid (FAFSA) and attend a college orientation before graduation.

## 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 242-7951 or shastacollegepuente. For information on Puente at the Tehama Campus, call (530) 529-8976.

## 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 shastacollegeveterans.

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) 242-7730.

## 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, allweather 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 Associate Dean of Physical Education and Athletics at (530) 242-7590 or check our website at shastacollegeathletics.

## 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 shastacollegeptk.

## 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 reside 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 Resources and then click on the Housing (dorms) web page. Fill out the reservation form (fillable form), print it out and 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 (room 2308), or call (530) 242-762.

## 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 events; such as, concerts, Club Kick-Off, Chili Cook-off, Constitution Day and other Student Senate and Interclub Council
events. The card allows reduced admission to various Student Senate sponsored activities, as well as discounts from popular vendors and restaurants around town (for a complete listing of vendors offering discounts please see the Student Senate website). Lastly, funds from the purchase of this card go toward many campus enhancement projects. 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 Lending Library

The Student Senate collects unwanted textbooks at the end of each semester. These books are then lent to students in need who may not have the resources to purchase the book otherwise. Any student lending books is required to have a valid Student ID Card.

## 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) 242-7622. 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 are encouraged to 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

ANDERSON, CATHERINE E. (1988) Mathematics; B.A., Humboldt State University; M.A., University of California, Santa Cruz
ASHBEY, KATHARINE (2012), Early Childhood Education; B.A., Lewis \& Clark College; M.A., Mills College
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 - Gateway to College; 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
BISH, LAURIE (2013) Nursing; B.S.N., Sonoma State University; M.S.N., California State University, Fresno

BITTNER, ROBERT (1991) Mathematics; A.S., Linn-Benton
Community College; B.S., Univ. of Wisconsin-La Crosse; M.S. University of Wisconsin- Milwaukee
BLASER, MARK (1996) Chemistry; B.A., Carleton College, Northfield, MN; M.S., University of Colorado, Boulder
BOGENER, REBECCA (2003) Psychological Counselor; B.A., California State University, Chico; M.A., California State University, Sacramento
BORG, CAROLYN (1990) Counselor; B.A., Biola College; M.S., California State University, Long Beach; Ed.D., Oregon State University, Corvallis
BRAZIL, KELLY (2002) Head Coach - Women's Volleyball/Physical Education; B.A., Humboldt State University
BREITBACH, WILLIAM (2013) Dean of Library Services and Educational Technology; B.A., University of California, Santa Barbara; M.A., California State University, Los Angeles; M.L.S., University of California, Los Angeles
BROOKSHAW, KEITH (1988) Counselor; A.A., Foothill College; B.A., University of California, Davis; M.S., California State University, Hayward; Ed. D., University of Southern California
BRYANT, THOMAS (2013) Automotive; A.A. Shasta College
CALKINS, PAUL (2004) English; B.A., University of California, Irvine; M.A., University of California, Berkeley

CARMENA, CRAIG (2012) Director of Campus Safety, Administration of Justice; B.S., San Jose State University
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., California State University, 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 State University; M.A., Fielding Graduate University; M.A., University of Phoenix
DAVIS, JASON (2013) Welding; A.S., Shasta College
DAVIS, MICHAEL (2002) Athletic Trainer, B.A., California State University, Chico, M.S., University of Arizona, Tucson
DOHERTY, CHARLES (1994) Nursing; B.S., Antioch College; B.S., California State University, Sacramento; M.S., University of California, Davis; M.S.N., California 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., California State University, 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., University of California, Davis; M.A., University of California, Riverside
FOOTE, BARBARA LYNN (1990) Nurse Aide/Home Health Aide; B.S.N., California State University, Chico

FOUST, KEITH (2014) Psychology; B.A., M.A., California 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
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, M.S.N., California State University, Sacramento
GOOGINS, ROBERT P. (1981) Business Education; A.A., College of the Siskiyous; B.S., California State University, Sacramento; 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 Univ. GRIFFIN, DEBRA (2013) Mathematics; B.A., M.A., California State University, Sacramento
HAAS, LORRAINE (2002) Early Childhood Education; B.A., M.A., Sonoma State University
HAMAR, DIANA (2000) DSPS Counselor; A.A., Shasta College; B.A. Simpson College; M.A., University of San Francisco

HAMILTON SLANE, SANDRA (2007) Director, DSPS/EOPS; B.A., Wheaton College, MSW, University of Illinois
HANNAFORD, MORGAN (1998) Biology; B.A., Sonoma State University; Ph.D., University of California, Berkeley
HANSEN, STEVEN D. (1974) Agriculture/Physiology; B.S., California
State University, Fresno; M.S., University of California, Davis
HASKINS, DANIEL (2013) Associate Dean of Career Technical Education; B.A., University of the Pacific; J.D., Western State University; M.B.A., California State University, Chico.
HENDERSON, KAREN (2000) Dental Hygiene; A.S., Sacramento City College; B.A., Simpson University
HOLLINGSWORTH, LAUREN (2006) English; B.A., University of California, Irvine; M.A., Ph.D., University of California, Riverside
HOM, KERI (1997) Counselor; B.A., University of California, Irvine; Ph.D., Washington State University
JIMENEZ, EVA (2007) Dean of Business, Agriculture, Industry, Technology, Safety, and EWD; B.A., M.A., California State University, Sacramento
JOHNSTON, TIMOTHY (2013) Dean, Enrollment Services; B.A., Loyola Marymount University, M.Ed., Ed.D, University of California, Los Angeles
KEATING, JAMES F. (1989) Physical Education; B.A., Jamestown College; M.Ed., University of North Dakota
KELLER, SUSAN (2013) English/Puente; B.A., University of California, Los Angeles; M.A., University of New Mexico; Ph.D., University of California, Santa Barbara
KELLY, JASON (2001) Counselor; B.A., California State University, Sacramento; M.S., University of La Verne
KIMLER-RICHARDS, TRENA (2012) Agriculture; B.S., M.S., California State University, Chico
KNUDSEN, MICHELLE (2013) Counselor; B.A., M.A., California State University, Fresno
KUTRAS, CHRIS (1975) History/Political Science; A.A., Shasta College; B.A., M.A., California State University, Chico; Ph. D., University of San Francisco
LARSON, JAIME (1996) Mathematics; A.A., Porterville College; B.A., California State University, Chico; M.A., California State University, Fresno
LIGHTFOOT, ROBB P. (1990) Communication Arts; A.A., Bakersfield College; B.A., California State University, Bakersfield; M.A., California State University, Northridge
LIVINGSTON, JOHN (2006) Equipment Operations; A.A., Shasta College; B.S., M.S., California Polytechnic State University
LORING, SUSAN E. (1990) Counselor; B.A., Brown University; M.S., San Francisco State University
MACMILLAN, TEAL (1999) History; B.A., M.A., California State University, Chico
MARI, MIKE (2014) Associate Dean Physical Education and Athletics; B.S. Humboldt State University; M.A., University of Phoenix

MARLEY, RONALD K. (1995) Fire Technology; A.S., Solano College; B.A., California State University, Sacramento

MARTIN, THOMAS (2002) MIS/Business; B.S., M.S., Utah State University; Ph.D., University of La Verne
MASULIS, THOMAS C. (1991) Physics/Mathematics; B.S., University of Illinois; M.A., University of California, Berkeley
MAXWELL, ANITA (1989) Mathematics; A.A., Shasta College; B.A., M.A., California State University, Chico

McBROOME, LYNDIA (1998) Nurse Aide/Home Health Aide; A.A., Shasta College; B.A., California State University, Chico
McCANDLESS, JENNIFER (1998) Math; B.A., California State University, Sacramento; M.S., Oregon State University McCURRY, SARA (2007) English; B.S. Minot State University, North Dakota; M.A., Texas State University; Ph.D., University of Oregon McQUEEN, MEGAN (2000) Counselor; B.A., California State University, Sacramento; M.S., San Francisco State University

MEACHAM, SUSAN (1998) Microbiology; A.S., Grossmont College; B.A., Point Loma College; M.S., Loma Linda University

MIHELE, CAMELIA (2013) Mathematics; B.A., University of California, Santa Barbara; M.A., California State University, Fullerton MOREHOUSE, THOMAS (2001) Counseling; B.S., M.A., California State University, Fresno
MOUNTAIN, CAREL (1998) Associate Degree Nursing; B.S., Pacific Union College; M.S., Sonoma State University
MUNROE, DEAN (1976) Drama; B.A., M.A., Humboldt State University
NICHOLAS, RAYMOND (2005) Diesel Technology; A.S. Oregon Institute of Technology
NIGRO, FRANK G. (1997) Dean of Science, Language Arts, and Math; B.A., California State University, Chico; M.A., Ph.D., Vanderbilt University, Nashville, TN
NOLTE, KENNETH (2002) Natural Resources; B.S., University of Wisconsin; M.S., Texas A\&M University
O'RORKE, KEVIN (2006) Vice President of Student Services; B.S., Idaho State University; M.Ed., Northern Arizona University; Ph.D., Arizona State University
OSA, TONY (2013) Director of Fire Technology/EMS; A.S., Lassen College; B.A., California State University, Chico; M.A., University of Montana
PATTERSON-TUTSCHKA, ANDREW (2013) Art; B.A., University of Michigan, M.A., Pennsylvania Academy of the Fine Arts
PERRIN, RALPH (2007) Dean of Arts, Communication, Consumer and Social Sciences; B.A., Walla Walla University; M.A., Ph.D., Loma Linda University
PETERS, BRAD (2006) Culinary Arts; A.S. San Diego Mesa College; B.V.E., San Diego State University

PRESNELL, SHELLY (2005) Speech; B.A., M.A., California State University, Chico
RANDALL, MERIDITH (2012) Vice President of Academic Affairs; B.A., Amherst College, M.A., Cornell University; J.D., New York University School of Law
REDD, ROXANNE (2000) Associate Degree Nursing; B.S.N., City College of New York; M.S.N. University of Phoenix
REED, RANDAL (1999) Geology; B.S., University of Nevada; M.S., Northern Arizona University
REYNOLDS, LISA (2013) Nursing; A.D.N., Shasta College; B.S.N., Simpson University
ROBACK, NANCY (2014) Chemistry; B.S., Humboldt State University; M.S., University of Notre Dame
RODRIGUE, MORRIS (1999) Vice President of Administrative Services; B.S., M.S., New Mexico Tech, Socorro
ROYCE, KATHLEEN (2008) Dean of Health Sciences; B.S.N., Biola University; M.S.N., University of California, Los Angeles
RUANO, SYLVIA (2009) Program Director - TRiO/SSS Upward Bound; B.A., Simpson University; M.S., University of La Verne RUPERT, BRADLEY (2005) Head Baseball Coach/Physical Education; B.A., California State University, Chico; M.A., Simpson University
SALUS-SINGH, CAROLYN (2007) Reference and Instruction Librarian; B.A. Barnard College, Columbia University, M.L.S. University of Maryland
SAWYER, SUSAN M. (1990) English; B.A., M.A., San Francisco State University
SCHIMKE, SUSAN M. (1990) Art; B.F.A., University of Wisconsin; M.F.A., Ohio State University

SCHMITT, LEW F. (1990) Management Information; A.A., Grossmont College; B.B.A., M.B.A., National University
SCHURIG, CASEY (2008) OAS; B.S., M.A., California State University, Chico
SCHUTTER, AMY (2013) Director of Grant Development; B.A.
California State University, Chico; M.A., Troy University

[^11]SCOLLON, DANIEL (1996) Natural Res./Environmental Technology; B.S., California Polytechnic University, San Luis Obispo; M.A., San Francisco State University
SITTIG, ANN (2005) Spanish; B.S., University of Nebraska; M.A., San Francisco State University; Ph.D., Universidad Autonoma de Madrid, Spain
SIVADAS, IRAJA (2007) Mathematics; B.A., M.A., University of California, Santa Cruz
SMITH, EILEEN L. (1985) English; B.S., Georgetown University; M.A., Ph.D., University of California, Davis

SMITH, MARK (1992) Welding; A.A., Cerritos College; B.A., California State University, Fullerton
SNOW, TERRIE (1981) Associate Degree Nursing; A.D.N. Lansing (MI) Community College; B.S.N., M.S.N., Indiana University, Indianapolis
SPILLANE, BRIAN (2000) Counseling; B.A., M.A., Ph.D., University of Dallas
SPOTO, PAMELA L. (1991) English; B.A., M.A., California State University, Chico
SPOTTS, CHARLES R. (1990) Mathematics; B.A., California State University, Chico; M.S., California State University, Northridge STUPEK, RAYMOND (1986) Physical Education; B.A., Humboldt State University; M.A., Saint Mary's College of California
SUGIMOTO, RACHELLE (2012) Mathematics; B.A., Fresno Pacific College; M.A., California State University of Fresno
TATE, JAMES (2007) Archaeology/Anthropology; B.A. Old Dominion University, M.A. Northern Arizona University, Ph.D. University of California, Santa Barbara
TELLO, JUAN RAMON (2001) Philosophy; B.S., M.A., Ph.D., University of California, Santa Barbara
THOMAS, LINDA (2006) Associate Degree Nursing; A.A., Ventura College; B.S.N., University of California, Dominguez Hills; M.S.N., Sonoma State University
THOMPSON, CRAIG (1996) Head Football Coach/Physical Education; B.A., M.A., Humboldt State University
TIBBALS, KATHLEEN (2010) Early Childhood Education Center Director; B.A., Chapman University; M.S., Nova Southeastern University
TURNER, THERESA (1996) Speech; A.A., Brevard Community College, Cocoa, FL; B.A., M.A., University of South Florida, Tampa
VALDIVIA, DANIEL (2008) Counselor; B.A., California State University, Chico; M.S., University of La Verne
WAITE, LEIMONE (1998) Horticulture; B.S., University of California, Davis; M.S., California Polytechnic State University, San Luis Obispo WATERBURY, ELIZABETH (1999) Choral-Vocal Music; B.A., San Jose State University; M.M., San Francisco Conservatory of Music; Ph.D., University of California, Santa Barbara
WESTLER, SUSAN (1993) Nursing; B.S.N., California State University, Sacramento; M.S.N., California State University, Chico WHITMER, JOHN (2008) History; B.A., University of California, Santa Barbara; M.A., San Diego State University; Ph.D., University of Idaho
WIGGINS, SHERI (2009) Program Director, Foster and Kinship Care Education; B.A., MSW, California State University, Chico
WYLIE, HEATHER (2006) Sociology; B.A., University of California, Santa Barbara; M.A., University of California, Davis
WYSE, JOE, (2007) Superintendent/President; B.A., Kenyon College, Ohio; M.A., Trinity International University; Ed.D., Pepperdine University
YATES, SCOTT (2013) English; B.A., Christian Heritage College; M.A., San Francisco State University

## Shasta College Emeritus Association

For more information on the Emeritus Association, please visit our website at: www.shastacollege.edu/emeritus/

## Emeritus Faculty

Joan Adams
Eve-Marie Arce
Dorothy Arel
Dan Axtman
Terry Bailey
John Bertrand
Donald Bertucci
Anita Berwind
Joan Bestor
Toby Bodeen
Joan Bosworth
Norma Bross
Bill Burrows
Dave Bush
Candace Byrne
J. Scott Carter

Leo Chiantelli
Ed Clewett
Stephen Concklin
Ken Cooney
Steve Cragg
Lois Cushnie
Dorothy Davis
Leon Donohue
Joan Eberle-Long
Emeritus Staff
Maureen Armentrout
Jan Beale
Ann Beier
Betty Benson
Kay Berliner
Vincent Bodner
Linda Boyle
Chuck Brady
Sue Brix
Rita Brooks
Kathryn Brown
Beverly Buckley
Teri Christ
David Cook
Collean Crane
Lauren Crenshaw
Doug Davidson
Georgia Denny
Michael Dickinson
Dan Dunn
Cathy Elliott
Debbie Ellis
Anita Erwin
Eloise Felch
Rosie Finmand
Kenna Finneran
Cheryl Flowers
Karen Foster
Irene (Helzer) Foster

## Emeritus Administration

Janet Albright
Susan Anthis
Cassandra (Ryan) Buck
James Buckley
Gary Caswell
Ken Cerreta
William Cochran
Robert Davis

Leighton Edelman
Ross Fetters
Jack Finch
William Fitzgerald
James Gilbertie
Lyn Giovannoni
Allan Hansen
Kathleen Hansen
John Harper
Sue Hess
Dean Hinshaw
Jim Horton
Merrill Hugo
Sandra Johnson
Zena Juhasz
John Jurivich
Arline Kel
Judy Kelsey
Sharon Kennedy
Ken Kilborn
Donald Kirk
Judith Knowles
Lawrence Lease
Cathe Ledford
Marilyn (Day) Lehto
Lionel Leonard

Adele Freimann
Bud Futterer
Sharon Geeter
Cathy Grana
Rocky Gregory
Bill Guthrie
Paula Hamilton
Gertrude Hanson
Lynn Haring
Colleen Heier
Sandy Heisler
Tim Heisler
Bette Herndon
Connie Hiller
Peggy Hockaday
Judith Hosking
William Hubbard
Maria Jarvis
Horace Johns
Karen Johnson
Chris Jones
Paul Kerr
Kathy Kingsbury
Earl Leacy
Dee Long
Donald Lower
June Lynch
Mel Matsuwaki
Jeffrey McDonald, Sr.

Patricia Demo
Georgianne Dinkel
Margaret Dominici
Francis Duchi
Louise Goicoechea
Joe Golenor
Jim Gore
Robert Harlow

Lorelle Lindquist
Ted Lord
Warren Lytle
James Mack
Steve Mahoney
John Mandes
Bob McGill
Marcia McKenzie
Joe Mellon
Jim Middleton
Doug Milhous
David Mitchell
James Myatt
Garrith Perrine
Peter Petersen
Michael Piccinino
Joe Polen
Parker Pollock
Donald Prince
Judy Quine
Marsha Ray
Richard Regnart
Roberta Roberts
Kenneth Roe
Nicklas Rogers
Margaret Rooker

Donna McLaughlin
Calie Middleton
Nancy Millis
Bill Mullins
Rhonda Nehr
Bob New
Ann Newcomer
Bob Ostrowski
Sharon Owen
Jacquelynn Owens
Sandra Palmer
Bill Peck
Nancy Pesek
Barbara Piccinino
Phyllis Pollock
Robert Rawlins
Betty Reed
Jacqueline Rich
Ilene Riggs
Elouise Robinson
Heather Rockson
Doris Roe
Joyce Root
Dennis Ruegsegger
Lawrence Russell
Diane Saffen
Debbie Salseth
Judy Saunders
Susan Schnee

Gary Houser
William Justice
George Kutras
Gary Lewis
John Moore
Monte Murphy
Edward Neroda
Tom Orr

Raleigh Ross
Carol Rupe
Douglas Russell
Dianne Schweigert
Holly Scrivner
Mario Serafin
Michel Small
Douglas Soccio
Robert Soffian
Clifton Sowder
Vern Stainbrook
Maureen Stephens
Olando Tognozzi
Eldridge Trott
Kim Tyler
Salvador Valdivia
Joseph Vargas
Loyd Walter
Bruce Wendt
Richard Wilson
Dave Wright
Dennis Yardley
Sharon Yox

Carrie Schurig
Mary Selby
Carolyn Shaw
Jim Shurance
June Siemers
Allen Silveira
Thomas Simonsen
Darrell Smith
David Spath
Marjorie Stauft
Jan Stone
Sharon Strazzo
Chris Takemoto
Sue Tedder
Sharon Truett
Annabelle Tunin
Susan Wallace
Mary Jean Watson
Robbie West
June White
Millie White
Regina White
Gail Whittaker
Kathy Wilson
Lois Worthen
Elizabeth Lynne Yardley
Ralph Yardley
Sandra Yost
Royce Zumalt

Luz Marie "Lucha" Ortega
Debbie Parisot
James Poulsen
Don Spellman
Wanda Spratt
Benna Starrett
Jim Taylor
Sue Vanderwerf

## 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.

ADT, AA-T and AS-T Degrees: Transfer degrees designed for students transferring to the CSU system.

AS, Associate in Science Degree: Degree awarded for technical and occupational programs, and transfer science programs.
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/Student Success and Support Program: 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.
SCI*FI: Shasta College Inspiring and Fostering Independence is an educational support program for students who are current or former foster youth.
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.

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.

[^12]
## Index

| AA-T and AS-T Degrees | 5-1 | Career Center | 8-1 |
| :---: | :---: | :---: | :---: |
| Academic Staff | 9-1 | Catalog Rights | 5-28 |
| Academic Freedom | 7-1 | Certificates | 5-35 |
| Academic Honesty | 7-1 | Challenge (Credit by Exam) | 4-2 |
| Academic Renewal | 7-2 | Chemistry Courses | 6-25 |
| Accounting Clerk/Bookkeeper Program | 5-34 | Child Care Services | 8-1 |
| Accounting Courses | 6-2 | Chinese Courses | 6-27 |
| Accreditation | 1-1 | Civic and Community Engagement Courses | 6-27 |
| Accuracy Statement | 1-2 | CLEP | 4-2 |
| Adaptive Studies Courses | 6-3 | Communication Studies Courses | 6-27 |
| Administration of Justice Courses | 6-4 | Communication Studies Transfer Degree | 5-3 |
| Administrative of Justice AS Degree | 5-34 | Communications Courses | 6-28 |
| Administration of Justice Transfer Degree | 5-2 | Compliance Statement | 1-6 |
| Administrative Staff | 1-4 | Computer Information Systems Courses | 6-28 |
| Admissions and Enrollment Information | 2-1 | Computer Information Systems Programs | 5-51 |
| Admissions | 2-1 | Computer Maintenance Program | 5-54 |
| Adult Basic Education | 8-2 | Computer Use, Students | 7-3 |
| Advanced Placement | 4-2 | Construction Technology Courses | 6-32 |
| Advisory Information | 2-3 | Construction Technology Program | 5-54 |
| Agriculture - General Ag Courses | 6-6 | Continuing Students | 2-1 |
| Agriculture - Ag Business Courses | 6-7 | Corequisite Challenge Procedure | 2-5 |
| Agriculture - Ag Business Program | 5-35 | Corequisite Information | 2-3 |
| Agriculture - Animal Science Courses | 6-7 | Counseling | 2-2 |
| Agriculture - Environmental Horticulture Courses | 6-7 | Course Descriptions | 6-1 |
| Agriculture - Environmental Horticulture Program | 5-36 | Course Numbering System | 5-28 |
| Agriculture - Equine Courses | 6-10 | Credit by Exam | 4-2 |
| Agriculture - Equine Science Program | 5-36 | Crime Statistics | 1-5 |
| Agriculture - Equipment Ops and Maintenance Program | 5-37 | CSU General Education | 5-29 |
| Agriculture - Forest Science and Technology Program | 5-38 | Culinary Arts Courses | 6-33 |
| Agriculture - Horticulture Programs | 5-40 | Culinary Arts Program | 5-63 |
| Agriculture - Mechanized Ag Courses | 6-10 | Customer Service Academy Program | 5-55 |
| Agriculture - Livestock Quality Assurance Program | 5-42 | Dance Courses | 6-35 |
| Agriculture - Natural Resources Courses | 6-11 | Debts Owed to the College | 3-1 |
| Agriculture - Natural Resources Program | 5-42 | Degree Programs | 5-1 |
| Agriculture - Pest Control Advisor Preparation Program | 5-43 | Dental Hygiene Courses | 6-36 |
| Agriculture - Plant Science Courses | 6-13 | Dental Hygiene Program | 5-55 |
| Agriculture - Sustainable Ag Courses | 6-13 | Diesel Technology Courses | 6-38 |
| Agriculture - Sustainable Ag Program | 5-43 | Diesel Technology Program | 5-56 |
| Agriculture - Sustainable Practices Program | 5-44 | Dietary Service Supervisor Courses | 6-39 |
| Agriculture - Veterinary Science Courses | 6-13 | Dietary Service Supervisor Program | 5-57 |
| Agriculture - Viticulture Courses | 6-13 | Disabled Students Programs and Services (DSPS) | 8-3 |
| American Sign Language Courses | 6-14 | Discipline | 7-4 |
| Anatomy Courses | 6-14 | Distance Education | 4-3 |
| Anthropology Courses | 6-15 | Dropping a Class Without Record | 2-1 |
| Applied Geographic Information Systems | 5-45 | Early Childhood Education Courses | 6-39 |
| Archaeology Courses | 6-15 | Early Childhood Programs | 5-58 |
| Art Courses | 6-16 | Early Childhood Transfer Degree | 5-3 |
| Art Gallery | 8-4 | Earth Science Courses | 6-42 |
| Art Program | 5-46 | Economic and Workforce Development | 1-5 |
| Assessment | 2-2 | Economics Courses | 6-46 |
| Associate Degree - General Education | 5-27 | Education Courses | 6-46 |
| Associate Degree - General Studies Emphases | 5-19 | Education - Teacher Education Courses | 6-46 |
| Associate Degree Requirements | 5-1 | Emeritus | 9-4 |
| Associate of Arts - University Studies Emphases | 5-10 | Employment Services for Students | 8-2 |
| Astronomy Courses | 6-20 | Energy Courses | 6-47 |
| Athletics | 8-4 | Engineering Courses | 6-47 |
| Athletics Courses | 6-86 | Engineering Program | 5-13 |
| Attendance Policy | 7-2 | English Courses | 6-49 |
| Auditing a Course | 2-1 | English as a Second Language Courses | 6-52 |
| Automotive Technology Courses | 6-20 | English as a Second Language Certificate of Completion | 5-60 |
| Automotive Technology Programs | 5-47 | English, Basic Skills Courses | 6-53 |
| Basic Skills - English | 6-53 | English Transfer Degree | 5-4 |
| Biological Sciences Courses | 6-21 | EOPS | 8-3 |
| Board of Trustees | 1-2 | Equal Opportunity | 7-2 |
| Bookstore | 8-1 | Extended Education | 1-6 |
| Botany Courses | 6-22 | Extenuating Circumstances | 7-2 |
| Business Program | 5-49 | Family Studies and Services Courses | 6-54 |
| Business Administration Courses | 6-22 | Family Studies Program | 5-60 |
| Business Administration Transfer Degree | 5-2 | Fees | 2-5 |
| Business Admin - Accounting Concentration Program | 5-49 | Field Trips | 1-6 |
| Business Admin - Business Entrepreneurship Program | 5-50 | Financial Aid | 3-1 |
| Business Retailing Program | 5-50 | Fire Technology Courses | 6-55 |
| Calendar | 1-4 | Fire Technology Programs | 5-61 |
| CalWORKs | 8-2 | Fire Technology (FTWL) Courses | 6-59 |
| CARE | 8-2 | Fire Technology (FTWO) Courses | 6-60 |


| Fire Technology (FTWP) Courses | 6-63 |
| :---: | :---: |
| First Aid/CPR/EMT Courses | 6-64 |
| First-Time Students | 2-1 |
| Foundation | 1-6 |
| French Courses | 6-64 |
| Gateway to College Program | 8-3 |
| General Education - California State University | 5-31 |
| General Education Major | 5-29 |
| General Education - University Studies | 5-10 |
| Geographic Information Systems, Applied Program | 5-47 |
| Geography and Geospatial Technologies Courses | 6-65 |
| German Courses | 6-66 |
| Glossary of College Terms | 10-1 |
| Grading Definitions | 4-1 |
| Grading Policy | 4-1 |
| Harassment, Prohibition of | 1-7 |
| Health Courses | 6-67 |
| Health and Wellness Services | 8-1 |
| Health Occupations Courses | 6-67 |
| High School Diploma | 8-3 |
| History Courses | 6-68 |
| History of Shasta College | 1-5 |
| Honor Society | 8-4 |
| Hospitality Courses | 6-69 |
| Hospitality Programs | 5-63 |
| Hospitality Management Programs | 5-65 |
| Housing | 8-4 |
| Humanities Courses | 6-70 |
| IGETC | 5-31 |
| Independent Study | 4-3 |
| Industrial Technology Courses | 6-70 |
| Industrial Technology Program | 5-66 |
| Institutional Student Learning Outcomes | 1-2 |
| International Baccalaureate (IB) Examinations | 4-3 |
| International Students | 2-2 |
| Japanese Courses | 6-71 |
| Job Placement | 8-1 |
| Journalism Courses | 6-71 |
| Kinesiology Courses | 6-72 |
| Kinesiology Transfer Degree | 5-5 |
| Library | 8-1 |
| Life Management Program | 5-67 |
| Limitation on Enrollment Information | 2-3 |
| Mathematics Courses | 6-72 |
| Microbiology Courses | 6-74 |
| Military Experience | 4-3 |
| Mission Statement | 1-2 |
| Motor Vehicles on Campus | 1-5 |
| Music Courses | 6-74 |
| Music Department | 8-5 |
| Music AA Degree | 5-67 |
| Music Transfer Degree | 5-6 |
| Native American Sustainability Studies | 6-78 |
| Natural History Courses | 6-79 |
| Natural Resources (see Agriculture-Natural Resour |  |
| Non-Residents | 2-6 |
| Nondiscrimination | 1-7 |
| Nonresident Tuition Exemption | 2-6 |
| Non-Traditional Ways to Earn Credit | 4-2 |
| Nurse Aide/Home Health Aide Program | 5-68 |
| Nursing, Associate Degree Program | 5-69 |
| Nursing, Vocational Program | 5-70 |
| Office Administration Courses | 6-79 |
| Office Administration Programs | 5-70 |
| Open Access Policy | 1-6 |
| Pass/No Pass | 4-4 |
| Philosophy Courses | 6-82 |
| Philosophy Transfer Degree | 5-6 |
| Physical Education Courses | 6-82 |
| Physical Education/Athletics Courses | 6-84 |
| Physical Science Courses | 6-88 |
| Physics Courses | 6-88 |
| Physics Transfer Degree | 5-7 |
| Physiology Courses | 6-88 |
| Political Science Courses | 6-88 |
| Prerequisite Information | 2-3 |
| Prerequisite Challenge Procedure | 2-5 |


| Privacy Rights | 7-10 |
| :---: | :---: |
| Probation | 4-5 |
| Psychology Courses | 6-89 |
| Psychology Transfer Degree | 5-7 |
| Puente | 8-4 |
| Refunds | 2-6 |
| Registered Nursing Courses | 6-90 |
| Registered Nursing Program | 5-69 |
| Registration and Related Fees | 2-6 |
| Repetition of a Course | 4-4 |
| Residency | 2-6 |
| Returning Students | 2-1 |
| Scholarships | 3-1 |
| Scholastic Deficiency | 4-4 |
| Sexual Violence Prevention and Education | 1-6 |
| Sign Language Courses | 6-14 |
| Skills Development Courses | 6-92 |
| Smoking and Tobacco Use Restrictions | 7-2 |
| Sociology Courses | 6-92 |
| Sociology Transfer Degree | 5-8 |
| Spanish Courses | 6-93 |
| Special Admits | 2-6 |
| Special Education (see Adaptive Studies) |  |
| Special Programs | 8-2 |
| Standards for Dismissal | 4-5 |
| Student Activity Cards | 8-5 |
| Student Clubs | 8-5 |
| Student Code of Conduct | 7-2 |
| Student Computer Technology Access | 7-3 |
| Student Designated Free Speech Area | 7-4 |
| Student Development Courses | 6-94 |
| Student Discipline | 7-4 |
| Student Employment Services | 8-2 |
| Student Equity Policy | 7-9 |
| Student Government (Student Senate) | 8-5 |
| Student Grievance Policy | 7-9 |
| Student Grievance Procedure | 7-9 |
| Student Health Services | 8-1 |
| Student Learning Assessment | 7-10 |
| Student Records | 7-10 |
| Student Rights/Responsibilities | 7-1 |
| Student Senate | 8-5 |
| Student Standards of Conduct | 7-2 |
| Students with Disabilities | 8-2 |
| Studio Arts Transfer Degree | 5-8 |
| Table of Contents | 1-2 |
| Theatre Arts Courses | 6-95 |
| Theatre Department | 8-5 |
| Theatre Arts AA Degree | 5-73 |
| Theatre Arts Transfer Degree | 5-9 |
| Transfer Center | 8-2 |
| Transition Certificate for Students with Disabilities | 5-74 |
| Transportation | 1-6 |
| TRiO Programs | 8-3 |
| Tutorial Services | 8-4 |
| Unlawful Discrimination Policy | 1-6 |
| Upper Division Work | 2-1 |
| Veterans | 8-4 |
| Vocational Nursing Courses | 6-97 |
| Vocational Nursing Program | 5-72 |
| Water Treatment Technology Courses | 6-98 |
| Watershed Restoration Program | 5-74 |
| Water/Wastewater Treatment Program | 5-75 |
| Welding Technology Courses | 6-98 |
| Welding Technology Program | 5-75 |
| Withdrawing from a Class | 4-5 |
| Work Experience | 4-4 |
| Worksite Learning | 4-4 |
| Zoology Courses | 6-100 |


[^0]:    -Student may take ACCT 2 in place of ACCT 101 or ACCT 102

[^1]:    SC Program: CT. 3449
    PROGRAM DESCRIPTION: The Geographic Information Systems (GIS) Certificate at Shasta College provides students with the knowledge and skills needed to apply principles, methods and tools of geographic information systems (GIS). Students develop foundation principles of maps, geographically referenced data, imagery and global positioning systems. GIS fundamentals are taught, both in conceptual and practical terms. Students learn the design of geographic databases and the capture of data using global positioning systems (GPS) and remotely sensed imagery. Spatial analysis skills are developed, from basic geographic inquiry through more complex analysis using GIS overlays and models. Students learn the principles and practice of remote sensing and image processing for integration with GIS and GPS. Maps are designed and implemented for output in hardcopy and digital formats. Worksite learning allows students to gain GIS workplace experience and to develop contacts among the community of GIS professionals. Successful students will have strong computer and critical thinking skills. Refer to http://www.shastacollege.edu/gis for more information.

    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.
    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]:    Continued on next page...

[^4]:    ASL 2L AMERICAN SIGN LANGUAGE 2 SKILL-BUILDING LAB - 1 Unit (formerly SL 93, SPED 95D)

    Grading: Pass/No Pass Option
    Prerequisite: ASL 1 L with a grade of C or higher
    Corequisite: 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.

[^5]:    ANTH 25 CULTURE AND HISTORY OF THE NORTH AMERICAN INDIAN - 3 Units
    Grading: Pass/No Pass Option
    Advisory: ENGL 280 with a grade of C or higher 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.

[^6]:    BUAD 44 INVESTMENTS - 3 Units (formerly FIN 44)
    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

[^7]:    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.

[^8]:    CHEM 11 CHEMISTRY LAB FOR THE LIBERAL ARTS - 1 Unit Grading: Pass/No Pass Option
    Corequisite: CHEM 10 or previous completion of 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 nonmathematical, 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.

[^9]:    GEOG 10 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS - 3 Units (formerly GIS 10, NR 84)
    Grading: Pass/No Pass Option
    Corequisite: GEOG 9, or previous completion of GEOG 9 with a grade of C or higher
    Advisory: CIS 1 with a grade of C or higher or demonstrated computer literacy.
    Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)

    This course covers the theory and practice of geographic information systems (GIS). Students learn essential GIS procedures for data

[^10]:    MATH 2B PRECALCULUS TRIGONOMETRY - 3 Units
    Prerequisite: MATH 2A with a minimum grade of $C$ or better or Math Placement Level 5 or higher
    Note: Students may take either MATH 2A or MATH 2B, or MATH 2 in order to meet transfer requirements. Successful completion of both MATH 2A and MATH 2B is the equivalent of MATH 2.
    Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
    A course on trigonometry utilizing function graphing technology. The

[^11]:    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.

[^12]:    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.

