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

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

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

Cheri A. Beck
Judi D. Beck
Patricia A. Hunn
Harold J. Lucas
Martin B. Myers
Kendall S. Pierson
Rayola B. Pratt
Student Trustee, Robert Wilson

MISSION STATEMENT

The Shasta-Tehama-Trinity Joint Community College District is committed to providing open access and opportunity for success to students who have diverse backgrounds, interests and abilities. By offering programs leading to successful completion of a quality university transfer program, or occupational-technical education, the District is responsive to the needs of our communities within a changing global society. By offering comprehensive campus and community service programs, the District enables students to achieve personal as well as academic potential and contributes to the social, cultural, and economic development of our region.

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OFFICE OF ACADEMIC AFFAIRS

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

ACCURACY STATEMENT

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

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.
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 the new century.

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, you will 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 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.

Gary A. Lewis
Superintendent/President

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.

Because of the diversified goals and needs of its students, Shasta College offers a wide range of programs and services, including counseling, tutoring, student activities, veteran affairs, cultural events, lecture series, workshops, and art exhibits. Shasta College has an extensive Distance Learning network. The Red Bluff Center and continuing education centers at Weaverville, Burney, Corning, and Hayfork utilize interactive television and computer-assisted learning to supplement on-site extended education.

Shasta College is fully accredited by the Western Association of Schools and Colleges, and 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. Shasta College was founded in 1948 as part of the Shasta High School District. After opening its doors on Eureka Way in Fall 1950 with 256 day students, Shasta College grew so rapidly that in 1964, voters approved a bond issue for construction of a 336 acre campus at the college’s present location. Fall 2000 was the 50th Anniversary of Shasta College, serving the north state with pride and distinction.

Welcome Everyone!

¡Bienvenidos a todos!
¡Bienvenidos a Shasta College! Nuestra escuela está aquí para servir a todos los estudiantes. Los estudiantes extranjeros y los que no hablan inglés siempre recibirán las mismas atenciones y oportunidades como cualquier otro estudiante. ¡Nuestro colegio es su colegio!

Applications and information should be requested from:
Admissions 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
FALL SEMESTER 2006

Aug. 21 .............. INSTRUCTION BEGINS ON CAMPUS - DAY AND EVENING, ON AND OFF-CAMPUS.
Sept. 1 .............. Last day to register in person for a full-term class
Sept. 4 .............. Last day to register online for full-term class
Sept. 4 .............. Labor Day Holiday
Sept. 5 .............. Census Day for full-term courses
Sept. 15 .......... Last day to drop a full-term class without record.
Sept. 22 .......... Last day to declare credit/no credit option for full-term classes
Nov. 10 .......... Veterans' Day Holiday
Nov. 22 .......... Last day to withdraw from a full term class with a "W". (An evaluative grade will be given after this date.)
Nov. 22 .......... No evening courses (5 PM or later starting time). DAY COURSES HELD AS USUAL
Nov 23 – 26 ...... Thanksgiving Holidays
Nov 27-Jan. 5 ... Filing Period for Fall Grads to Apply for Associate Degree
Dec. 18 – 21 ...... Final Examinations
Dec. 22-Jan. 15. Semester Break

SPRING SEMESTER 2007

Jan. 15 .......... Martin Luther King Holiday
Jan. 16 .. INSTRUCTION BEGINS - DAY AND EVENING, ON AND OFF-CAMPUS
Jan. 26 .......... Last day to register in person for a full-term class
Jan. 29 .......... Last day to register online for a full-term class
Feb. 8 .......... Last day to drop a full-term class without record. See grading policy in the College Catalog for last day to drop short-term classes.
Feb. 9 .......... Lincoln’s Day Holiday
Feb. 12 .......... Census Day for full-term courses
Feb. 16 .......... Last day to declare credit/no credit option for full-term classes
Feb. 19 .......... Washington’s Day Holiday
April 2 – 6 .......... Spring Break
April 9 .......... Classes Resume
April 16-Jun 8 . Filing Period for Spring Grads to Apply for Associate Degree
April 27 .......... Last day to withdraw from a full-term class with a "W". (An evaluative grade will be given after this date.)
May 21-25 ...... Final Examinations
May 25 .......... 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.

The campus is located on 337 acres, and is referred to as the Stillwater campus because it is bordered by Stillwater Creek on the East Side. The District also owns an additional 320 acres in Bella Vista. The District encompasses the counties of Shasta, Tehama, and Trinity, and small portions of Lassen, Modoc, and Humboldt counties as well. The District covers approximately 10,000 square miles, which is larger than the state of Massachusetts. The District operates extended education sites in Burney, Red Bluff, and Weaverville.

The college has a childcare center, residence halls, its own waste-water treatment facility, a horse arena, an Olympic-sized swimming pool, and a fire station, which serves the surrounding area. The campus includes wooded groves – including a redwood memorial grove – ponds, nature trails, two streams, and a 150-acre farm. There is also a man-made waterfall constructed of lava rock from Hat Creek, designed by The Shasta College Art Department. Shasta College was one of the first community colleges to possess a Carillon, which dates back to 1968. It plays on the hour from 8:00 a.m. to 5:00 p.m. daily.

The Shasta College 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.

Shasta College is part of the California Community College system, which is the largest system of higher education in the world, with 111 colleges organized into 72 districts. According to the 1999 U.S. Census, 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 Census, 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).

Cars 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. 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: http://www.shastacollege.edu/resources/security/parking/parkingtrafficreg06.pdf or may be obtained from Campus Safety at (530) 225-4699. Permits may be obtained at registration or from the Cashier’s Office.

Cost of Parking Permit: Refer to the Schedule of Classes or call (530) 225-4699.

Daily Parking Permits are available from parking permit machines in various locations throughout the campus parking lots. These are valid for the day on which the permit is purchased.

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

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

Enforcement Campus parking and traffic safety regulations are enforced by Shasta College and the Redding Police Department. Security issues parking citations for violations. For additional information contact campus parking at (530) 225-4699.

Community Education
Where do you go for an affordable, fun evening of dancing? What plants and trees grow well in the Redding soil and summer heat? Did you ever want to learn how to get the most out of your computer and your software programs? For the answer to all these questions and so much more, think about Community Education. Classes are designed for personal enjoyment, professional growth, skill improvement and for the promotion of lifelong learning. Classes are short in duration and some offer an alternative through online classes. Our instructors are local, regional and national business professionals and expert practitioners in their field. For more information on Shasta College Community Education, our websites are: www3.shastacollege.edu/communityed and www.ed2go.com/shasta or you can call 225-4835 for more information.

Contract Education
Contract Education offers customized day, evening and weekend training designed to meet the specific needs of local businesses and/or individuals. Classes can be offered for credit or non-credit and can take place on campus or at your workplace. Please contact the Community Education Department at 224-4835 for more information.
Crime Statistics

The Annual Shasta College Security Report is provided to help ensure a safe environment for our college community and prospective students and employees. This document contains crime statistics for the previous three years in addition to valuable safety and security information. A complete copy of the Security Report may be obtained from the Security Office located in Room 5015. The report is also available through our Campus Website: http://www.shastacollege.edu/resources/security/crimestat04.pdf.

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 Centers 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 Center are Monday through Thursday, 8:00 a.m. to 9:30 p.m., and Friday, 8:00 a.m. to 5:00 p.m.

- Intermountain Center (530) 335-2311
  37581 Mountain View Road,Burney CA 96013
  burney@shastacollege.edu
- Red Bluff Center (530) 529-8980
  900 Palm Street,Red Bluff CA 96080
  redbluff@shastacollege.edu
- SC@Weaverville Center (530) 623-2231
  210 South Miner Street,Weaverville CA 96093
  weaverville@shastacollege.edu

Services available at each Center include admissions assistance, on-site registration and counseling, assessment and orientation, tutoring, and career guidance. In other words, Extended Education Centers are a great place to start with Shasta College.

Field Trips and Excursions Liability Policy

Throughout the semester, the District may sponsor voluntary off-campus field trips/excursions. If you choose to participate, be advised that pursuant to California Code of Regulations, Subchapter 5, Section 55450, 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. Unless specifically advised otherwise, the college is not providing the transportation and it is your responsibility to arrange for your transportation to and from the activity. If the College is providing transportation but you do not use the transportation, you are responsible to make your own arrangements and the College assumes no responsibility or liability of any kind.

Foundation

The Shasta College Foundation was established in 1995. The Shasta College Foundation is 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 Board of Directors is made up of 17 volunteers representing Shasta, Tehama and Trinity counties. The Foundation's 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 memorium, 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
foundation@shastacollege.edu

Open Access Policy

The policy of this District is that, unless specifically exempted by statute or regulation, every course, course section, or class, reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the college(s) and who meets such prerequisites as may be established pursuant to regulations contained in Article 2.5 (commencing with Section 55200) of Subchapter 1 of Chapter 6 of Division 6 of Title 5 of the California Code of Regulations.

Sexual Violence Prevention and Education (AB 1088, amends Ed Code 67385.7)

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

http://www.shastacollege.edu/resources/security/sec.htm

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 Educational Amendments of 1972, the Rehabilitation Act of 1973, the Americans with Disabilities Act, and all other applicable federal, state, and local laws.
Unlawful Discrimination Policy (continued):

Nondiscrimination
It is the policy of Shasta-Tehama-Trinity Joint Community College District to provide an environment free of unlawful discrimination. The District is committed to equal opportunity in education 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, sex (gender), race, color, ancestry, sexual orientation, marital status, physical or mental disability, or because he or she is perceived to have one or more of the foregoing characteristics.

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

Prohibition of Harassment (including sexual harassment)
The Shasta-Tehama-Trinity Joint Community College District is committed to providing an educational, employment, and business environment that respects the dignity of individuals and groups. The District shall be free from unwelcome sexual advances, sexual intimidation and exploitation, requests for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment, as defined and otherwise prohibited by state and federal law.

Harassment based on any of the following statuses is prohibited and will not be tolerated: national origin, religion, age, sex (gender), race, color, ancestry, sexual orientation, marital status, physical or mental disability, or because he or she is perceived to have one or more of the foregoing characteristics.

It is both unlawful and a violation of this policy for anyone who is authorized to recommend or take personal or educational action affecting an employee or student, or who is otherwise authorized to transact business or perform other acts or services on behalf of the Shasta-Tehama-Trinity Joint Community College District, to engage in any form of harassment including sexual harassment or to retaliate against any individual for filing a complaint in an investigation.

Contact Information
The Human Resources/Equal Opportunity Employment Office is responsible for ensuring fair and equitable treatment. The unlawful discrimination policy is available at the Human Resources Office and on-line. The office is located in the Administration Building, Room 121, (530) 242-7640. Students with complaints of discrimination related issues may contact Patricia Demo in the Human Resources/Equal Opportunity Employment Office at (530) 242-7640 or Keith Brookshaw, the Dean of Student Services at (530) 225-4822. For further information regarding Section 504 of the Rehabilitation Act, contact the Section 504 Coordinator, or the Dean of Student Services, Shasta College, 11555 Old Oregon Trail, P.O. Box 496006, Redding, CA 96009-6006, (530) 225-4822.
Admission and Matriculation Information

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

Audit
Students must apply in the Admissions and Records Office for permission to audit.

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 shall be the same as any student enrolled in the class for credit but shall not exceed $15 per unit, per semester (Education Code Section 76370(a)). 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 semester units per semester.

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 Test Information" in the current Schedule of Classes for details on where and when assessment tests are given.

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. For the University of California system check with your counselor.

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 as well as at the community college level.

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. Not all courses numbered 1-99 are accepted by the University of California system for purposes of admission.

CALIFORNIA ARTICULATION NUMBER (CAN)
Shasta College, in cooperation with selected community colleges, California State Universities, and University of California campuses, is participating in a project entitled the California Articulation Numbering System (CAN).

Courses bearing this CAN designation will be accepted in lieu of courses at four-year institutions that carry the same CAN number with a given academic discipline. Full transfer credit for Shasta College CAN courses to participating institutions is thus ensured.

(CAN listing on next page)

CCCAGCANS NUMBERING SYSTEM
The California Community Colleges, the California State Universities (CSU, Chico; CSU, Fresno; Cal Poly, SLO and Cal Poly, Pomona; and the University of California, Davis, have developed a uniform numbering system for courses in Agriculture, Horticulture and Natural Resources. This numbering system is called CCCAGCANS and is assigned to courses that have a standardized statewide curriculum. For students who have completed courses that have a CCAGCANS number, this numbering system allows transfer between community colleges, and from the community college to a university, without delay or loss of units.

(CAN listing on next page)
### 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 an 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 college or university.

### Credit/No Credit Policy

Shasta College offers two categories of "credit/no credit" courses. "Credit/no credit" classes are designated in the college catalog and schedule of classes. The catalog and schedule must specify into which "credit/no credit" category each course falls: (Title 5, 55752 (a))

1. **"Credit/No Credit" Course**: All students are evaluated on a "credit/no credit" basis. Included are courses where there is a single satisfactory standard of performance which shall use CR/NC to the exclusion of other grades. "Credit" shall be assigned for meeting that standard, "no credit" for failure to do so. (Title 5, 55752 (a) (1))

2. **"Credit/No Credit" Option**: Courses that the Vice President of Academic Affairs has designated as "credit/no credit" and wherein each student may elect no later than the end of the first 30% of the term, whether the basis of evaluation is to be "credit/no credit" or a letter grade. Courses completed under the "credit/no credit" count toward graduation and transfer within the following limitations. (Title 5, 55752 (a) (2))

   a. Students may not use "credit/no credit" grade options for courses required in their major or minor field of study.
   b. Students may not use "credit/no credit" grade option in more than one course per semester, and may apply no more than ten semester credits taken toward the A.A./A.S. degree.
   c. It is the responsibility of the student to be familiar with the "credit/no credit" policy currently in force.
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, 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.

Dropping a Class Without Record

Students may drop a class and have no notation appear on their transcripts through the fourth week or 30% of the term for classes less than a semester in length. IT IS THE STUDENT’S RESPONSIBILITY TO DROP CLASS(ES). The necessary forms are available from Admissions and Records, Extended Education Centers, or by mail. 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.

Financial Aid for Enrollment Fees

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

1. For 2006-07, if you fall within these income levels:
   - Adjusted Gross Income (AGI) and/ or Untaxed Income
   - Number in Household (including yourself)
   - 2005 Total Family Income
   - 1
     - $14,355 or less
   - 2
     - $19,245 or less
   - 3
     - $24,135 or less
   - 4
     - $29,025 or less
   - +
     - Add $4,890 for each additional dependent

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 Veteran’s Dependent’s Fee Waiver – certification provided by the California Department of Veteran’s Affairs or your county Veteran’s Service 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 a deceased law enforcement/fire suppression personnel killed in the line of duty.

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

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

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

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

First-Time Students

MATRICULATION SERVICES

SUCCESS BEGINS WITH A PLAN! The college has found that students who have supplied transcripts, participated in English or Math assessments, attended an orientation and discussed their educational goals with a counselor significantly improve their performance in college. We call this process "matriculation."

FIRST-TIME STUDENTS are STRONGLY URGED to take advantage of the matriculation services. Those who do will be eligible for "priority registration" and be able to register for classes before the college's Open Registration period.

Participation in matriculation services is OPTIONAL for the following students. If you fall into one of these categories, contact the Admissions 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 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 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! Request an application packet from the Admissions Office. The packet includes an admissions application, as well as transcript request forms and information on Residence Halls, Financial Aid, parking and a variety of campus services. Complete and return the application form to the Admissions Office.
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 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 Test Information” in the current Schedule of Classes 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.
**First Time Students (continued):**

4. **Counseling:** Counselors provide information about the college and offer academic, transfer, career, and personal counseling. Specially trained counselors are available to students with special needs. Counseling is offered on both an appointment and drop-in basis. For more information or to make an appointment, call the Admissions Office at (530) 242-7650 or call the Extended Education site closest to you.

5. **Orientation:** The orientation program provides new students with the support and information they need to ensure a smooth and successful transition into Shasta College. Information on the following is provided as part of the orientation: vocational and certificate programs; transfer requirements; financial aid; EOPS/CARE services; CalWORKs; Student Support Services programs; student activities; learning and health services; and a campus tour are provided. For an Orientation appointment, call the Admissions Office at (530) 242-7650. **Note:** Both Counseling and Orientation appointments can be made with a single call to the Admissions Office.

6. **Registration:** All first-time students may register for classes during Open Registration. However, students who participate in matriculation services 1 through 5, above, will be given "priority registration" status and may register for classes before the general "Open Registration" period.

Students who have not taken advantage of all of the available matriculation services before their first registration at Shasta College are URGED to do so as soon as possible. Counseling, assessment, and orientation sessions are available throughout the semester. Contact the Admissions Office for further information on how to take advantage of these services.

**FOLLOW-UP COUNSELING**

Throughout the semester, counselors are available to assist students in planning and achieving their educational and career goals. Services are available on both an appointment and drop-in basis.

Students wishing to appeal any component of the matriculation process should contact the Director of Admissions and Records at (530) 242-7669.

**ASSESSMENT TEST INFORMATION**

Location: Administration Building, Room 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 102 is open Monday through Friday and on selected Saturdays, except for posted holidays. No appointment is needed. Limited evening assessments are also available. Seating is limited and available on a first come, first served basis. The assessments are on computers. Allow a minimum of two hours to complete all three sections. Assessments are available at Extended Education sites by appointment only.

Students with disabilities should contact Disabled Students Programs and Services (530) 225-4795 for information and assessment accommodations. English-as-a-Second Language students should take the ESL Assessment Exam.

**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 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)
- **CR - Credit** - Satisfactory achievement of course objectives. Student is passing the course with a "C" or better. (Not used in grade point calculations.)
- **NC - No Credit** - Student is doing "D" or "F" work in the course. (Not used in grade point calculations.)

**Grading Definitions (continued):**

**Non-Evaluative Symbols Definitions**

- **I – Incomplete** - Incomplete academic work for unforeseeable emergency and justifiable reasons at the end of the term may result in an "I" symbol being entered in the student's record. The condition for removal of the "I" shall be stated by the instructor in a written record. (Form available from the registrar). This record 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 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.
Grading Definitions (continued):
W - Withdrawal - Students may withdraw from a class after the official "drop" date and up through the fourteenth week* or 75% of the term for classes less than a semester in length. 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). Forms are available from Admissions and Records, Extended Education Centers, 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.

*This date may vary for classes of less than a full-term length.

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 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 deadline 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 4231). 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 FROM INSTRUCTOR TO ADMISSIONS OFFICE.

GRADE APPEAL PROCEDURE
A change in letter grade can be made only in the case of a declared error by the instructor or an administrative error in posting the grade.

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

International Students
International students must file an admission application; proof of English competency in the form of at least 450 on the TOEFL examination*; 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; and high school and college transcripts.

Students must be able to read, write and speak English at a level necessary to actively pursue a full-time academic program. They must present evidence of English competency: a minimum TOEFL score of 450 (written) or 133 (computer based), or with a minimum score of level Pre-One in the step EIKEN test (for Japanese applicants). For more information on the TOEFL test, visit www.toefl.org. The TOEFL code for Shasta College is 4696.

International students applying for 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.) Students must pay tuition fees at the time of registration.

International students wishing to attend Shasta College should direct their questions and applications to the Student Development & Information Services Office (Rm 2308), http://www3.shastacollege.edu/internationalstudents/index.htm or the Admissions and Records Office.

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 minimum units shown below toward fulfillment of the designated General Education-Breadth area if the examination is included in a full or subject-area certification. Individual CSU campuses may choose to accept more units than those specified below toward completion of General Education-Breadth requirements. 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.
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 Center 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 Center office. A listing of approved courses can be obtained from the Center office.

CREDIT THROUGH THE COLLEGE LEVEL EXAMINATION PROGRAM (CLEP) – BOARD POLICY 4235
Upon completion of six semester units at Shasta College, a student may submit official College Level Examination Program (CLEP) test results to Shasta College from the College Entrance Examination Board (CEEB). Contact the CEEB for a scaled score of 50 or higher on a CLEP examination will earn credit. (For the older General Examinations, 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 University 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 Center 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 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:

<table>
<thead>
<tr>
<th>AP Subject Exam</th>
<th>Semester Units</th>
<th>CSU GE</th>
<th>IGETC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art: History of Art</td>
<td>3 units</td>
<td>Area C1</td>
<td>Area 3A</td>
</tr>
<tr>
<td>Art Drawing/Studio</td>
<td>3 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>3 units</td>
<td>Area B2</td>
<td>Area 5B</td>
</tr>
<tr>
<td>Chemistry</td>
<td>6 units</td>
<td>Area B1/B3</td>
<td>Area 5A</td>
</tr>
<tr>
<td>Economics: Macro</td>
<td>3 units</td>
<td>Area D2</td>
<td>Area 4B</td>
</tr>
<tr>
<td>Economics: Micro</td>
<td>3 units</td>
<td>Area D2</td>
<td>Area 4B</td>
</tr>
<tr>
<td>English: English Lang/Comp</td>
<td>3 units</td>
<td>Area A2</td>
<td>Area 1A</td>
</tr>
<tr>
<td>English: English Lit/Comp</td>
<td>6 units</td>
<td>Area A2/C2</td>
<td>Area 1A</td>
</tr>
<tr>
<td>French: French Language</td>
<td>6 units</td>
<td>Area C2</td>
<td>Area 6A</td>
</tr>
<tr>
<td>French: French Literature</td>
<td>6 units</td>
<td>Area C2</td>
<td>Area 6A</td>
</tr>
<tr>
<td>German Language</td>
<td>6 units</td>
<td>Area C2</td>
<td>Area 6A</td>
</tr>
<tr>
<td>Government and Politics: U.S.</td>
<td>3 units</td>
<td>Area D8</td>
<td>Area 4H</td>
</tr>
<tr>
<td>Gov. &amp; Politics: Comparative</td>
<td>3 units</td>
<td>Area D8</td>
<td>Area 4H</td>
</tr>
<tr>
<td>History: European History</td>
<td>3 units</td>
<td>Area D6</td>
<td>Area 4F</td>
</tr>
<tr>
<td>History: US History</td>
<td>3 units</td>
<td>AreaD6</td>
<td>Area4F</td>
</tr>
<tr>
<td>Latin: Vergil</td>
<td>3 units</td>
<td>Area C2</td>
<td></td>
</tr>
<tr>
<td>Latin: Latin Literature</td>
<td>3 units</td>
<td>Area C2</td>
<td></td>
</tr>
<tr>
<td>Mathematics: Calculus AB</td>
<td>3 units</td>
<td>Area B4</td>
<td>Area 2A</td>
</tr>
<tr>
<td>Mathematics: Calculus BC</td>
<td>3 units</td>
<td>Area B4</td>
<td>Area 2A</td>
</tr>
<tr>
<td>Music Theory</td>
<td>3 units</td>
<td>Area C1</td>
<td></td>
</tr>
<tr>
<td>Physics B</td>
<td>6 units</td>
<td>Area B1/B3</td>
<td>Area 5A</td>
</tr>
<tr>
<td>Physics C (Mechanics)</td>
<td>3 units</td>
<td>Area B1/B3</td>
<td>Area 5A</td>
</tr>
<tr>
<td>Physics C (Elect/Magnet)</td>
<td>3 units</td>
<td>Area B1/B3</td>
<td>Area 5A</td>
</tr>
<tr>
<td>Psychology</td>
<td>3 units</td>
<td>Area D8</td>
<td>Area 4F</td>
</tr>
<tr>
<td>Spanish: Spanish Language</td>
<td>6 units</td>
<td>Area C2</td>
<td>Area 6A</td>
</tr>
<tr>
<td>Spanish: Spanish Literature</td>
<td>6 units</td>
<td>Area C2</td>
<td>Area 6A</td>
</tr>
<tr>
<td>Statistics</td>
<td>3 units</td>
<td>Area B4</td>
<td>Area 2A</td>
</tr>
<tr>
<td>Statistics</td>
<td>3 units</td>
<td>Area B4</td>
<td>Area 2A</td>
</tr>
</tbody>
</table>

DISTANCE EDUCATION (DE)
DE is a method of instruction that is designed to offer courses in other than the conventional classroom setting. Courses are available at each of the main Extended Education sites (Anderson, Burney, Corning, Hayfork, Hoopa, Los Molinos, McArthur, Red Bluff, and Weaverville) as well as on campus. Courses are offered in a variety of formats, but all formats may not be available at all sites. Formats include: Internet, Interactive Television (ITV), TV/Internet (TVIN), streaming media classes. In addition to the instructional formats, all courses include substantial readings, interaction with faculty, and exams. In many cases, much of the course work may be completed off campus. Courses are available in a variety of disciplines and meet the transfer, General Education, or vocational requirements for the specific course being taught. All courses offered in these formats offer the same rigorous learning experience found in 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. Students who are usually successful in Distance Education courses are those who enjoy learning independently, are highly motivated, and possess good study skills.

Internet-based Courses: A variety of courses are available fully online using WebCT courseware. As with face-to-face courses, internet courses usually have set deadlines but offer the student greater flexibility since class meetings typically take place asynchronously online. Students in online courses should have regular access to the internet and should be proficient at email, web navigation, and sending attachments. Some courses (“Hybrid” courses) are offered in a mixed format, combining face-to-face instruction with online instruction or online instruction with a television component.

Interactive Television (ITV) Courses: 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 sites 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.
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 .5-2 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

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

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

MILITARY EXPERIENCE

In general, Shasta College will follow the recommendations of the State Board of Educ., the Univ. of Calif., and the American Council of Education in granting credit for military experience. Total credit for military experience is limited to 15 units.

Correspondence courses given by the United States Armed Forces Institute or by an accredited college or university are accepted for credit value as recommended by the American Council on Education. College credit will not be allowed for duplicated training. The total number of units granted for USAFI courses shall not exceed 24 units. No credit will be given at Shasta College for General Education Development tests.

Credits will be granted to those students who present a DD214. The student will be required to provide the Registrar with a copy of his/her DD214 for verification.

Application for such credit must be made on a form obtained from the Registrar's Office at Admissions and Records. This credit must be verified. All new Veterans to Shasta College should call for information and an appointment at (530) 242-7662 or visit the Admissions and Records Office, Bldg. 100.

PRIOR WORK EXPERIENCE

A student having experience related to the program in which he/she is enrolled may be granted credit for such experience. The credit is applicable only for an Associate degree at Shasta College. Students applying for credit should obtain an application from the Admissions & 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 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
- AUTO 94
- BUAD 94
- CAS 94
- CIS 94
- CONS 94
- COOP 94
- CULA 94
- DIES 94
- DSS 94
- ECE 94
- EDUC 94
- ELEC 94
- ENGR 94
- ENVR 94
- FIRS 94
- FSS 94
- GIS 94
- HEOC 94
- HORT 94
- HOSP 94
- HUSV 94
- LEGL 94
- MKTG 94
- 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: Worksite learning will NOT be paid unless it is required for the student’s major.

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.

Prerequisites, Corequisites, Limitations on Enrollment and Advisories

FREQUENTLY ASKED QUESTIONS

What is an “advisory on recommended preparation”?

Advisories are intended to identify skills which will broaden or deepen a student's learning experience, but without which the student can still succeed in the course. The college does not block enrollment in a course for lack of advisory skills.

Where can 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-first-served, or priority system; 5) statutory, regulatory, or contractual requirements; 6) auditions and tryouts for intercollegiate competition, honors, or public performances courses; 7) blocks of courses for cohorts of students.

NOTE: Shasta College enforces limitations on enrollment.
Prerequisites, Corequisites, Limitations on Enrollment and Advisories (continued):

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

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

There are two types of corequisites: two-way corequisites and one-way corequisites. A “two-way” corequisite is when two (or more) courses are so intertwined that neither course stands alone. A student would not have a reasonable chance to be successful in either course without being concurrently enrolled in both courses. A “one-way” corequisite is when one of the courses depends on the content of the other course, but not 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 enrolled in the prerequisite course at the time of registration, you will be allowed to conditionally enroll in the target course (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) 225-3973, before attempting to register for the course.

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

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

1) The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite
2) The prerequisite or corequisite has not been established in accordance with the district’s process for establishing prerequisites and corequisites
3) The prerequisite or corequisite is in violation of Title 5
4) The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner
5) The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or corequisite course has not been made reasonably available, or accessible. For a full description see Title 5, Section 55201(f).

If you believe you have grounds for filing a challenge, go to the Office of Admissions and Records for information on the Prerequisite Challenge Procedure. If you choose to file a challenge, you have the responsibility of showing that grounds exist for the challenge.

Note: If you are citing reason # 1 as the basis for challenging the prerequisite/corequisite, you must first have failed to meet the prerequisite/corequisite through the Multiple Measures Procedure. You should seek advice regarding the challenge from a Counselor.
The student will obtain a Prerequisite/Corequisite Challenge Form at the Admissions & Records Office. The Office of Instruction 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 Instruction 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 Center Office. The Academic Center 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.
Prerequisite/Corequisite Challenge Procedure:

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 Center 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 & 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 & 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 Instruction.

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 Instruction 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 & Records Office within five business days from the date that the challenge was filed with the Vice President of Academic Affairs. If the college has not made a decision within five working days then the student’s challenge is upheld and the Admissions & 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 Disability Resource Center 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 & Records, or to the Vice President of Academic Affairs as appropriate. The Challenge Procedure will then proceed as outlined above.

Registration and Related Fees

1. Enrollment Fee: Refer to current class schedule or visit the Shasta College website.
2. Student Health Fee: Refer to current class schedule or visit the Shasta College website.
3. Campus Center Fee: Refer to current class schedule or visit the Shasta College website.
4. Out-of-State Tuition: Refer to current class schedule or visit the Shasta College website.
5. Day and evening parking fee: Refer to current class schedule or visit the Shasta College website (Campus Security).
6. Bus Transportation Fee: 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 fee; each one thereafter is $3.00 (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 Office for processing. If the student has an earlier deadline, please indicate clearly on the request if it is to be considered a RUSH. A 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 would 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 only $7.00 for the rush processing component of the request.

Bus Transportation Fee: Refer to current class schedule or visit the Shasta College website.

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). All refund drop date information is included on students’ computerized receipt. Contact the Admissions 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 (BOGG) fee waiver after they have paid their enrollment/health fees will be reimbursed only for the semester in which they are granted a BOGG fee waiver. The BOGG fee waivers 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.***

Repetition of a Course
Repetition of a college course is restricted and shall occur only under the following conditions:
1. Students receiving a D, F, or NC grade in a course may repeat the course once without petition (Title 5, 55761).
2. In order to repeat a course more than once, or to repeat a course in which an A, B, or C grade was earned, the student must petition the Scholastic Standards Committee for permission prior to enrolling in the course. Decisions of the Scholastic Standards Committee may be appealed to the Superintendent/President. When a course is repeated under the provision, the grade awarded shall not be calculated in the student's grade point average (Title 5, 55763).

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 Office for reclassification as a resident.

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 6440.
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", "I", and "NC" are recorded shall be removed from probation when the percentage of units in this category drops below fifty percent (50%).

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

Special Admits
SPECIAL PART-TIME ENROLLMENT (FORMERLY CONCURRENT ENROLLMENT)
Note: The Special Part-Time Enrollment procedures are currently being revised. Check with Admissions Office for specific details. A high school student wishing to enroll in Shasta College classes must have the permission of his/her high school principal and follow instructions detailed on the form. Forms are available at the local high schools. Advanced approval for all special admits 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.

Special Programs
ADULT LITERACY PROGRAM
A mentoring program designed to help adults improve reading, writing and speaking skills. The course will provide one-on-one mentoring in remedial reading, writing and math skills. Based on individual assessment of needs, a program of study will be written for each student. Students are able to prepare for the GED and college assessment tests. This is a transitional program designed to prepare adults for college entry. Students benefit from supervised practice. Note: This program has continuous open enrollment.

HIGH SCHOOL DIPLOMA PROGRAM
Residents of the college 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 be 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 Center (530) 245-2626.
REINSTATEMENT

A student may be reinstated after an absence of one or more semesters with the Admissions and Records Office. A dismissed student must file a request for reinstatement because of academic or progress disqualification. A dismissed student must meet all the requirements for matriculation in applying for reinstatement. After 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 of reinstatement. A student who does not complete the required percentage of units will be dismissed.

NEITHER 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.

Transfer Information –Lower Division College Program

Shasta College offers the first two years of a four-year college or university program for students who plan to transfer. Students at Shasta College have the opportunity to prepare for transfer to a four-year institution virtually any major offered by those colleges or universities.

Shasta College students are urged to give careful thought to their transfer major and are invited to consult with a counselor to develop a four-semester plan that enhances their chances of transferring to the college or university of their choice.

Potential transfer students should do all of the following as early as possible:

1. Select the college or university to which they plan to transfer.
2. Select the major they wish to pursue at the college or university selected.
3. Consult a Shasta College counselor for assistance in planning an appropriate course of study that will provide opportunity to complete requirements for admission, for the major, and for General Education.
4. Examine the college catalog, transfer program guides, and other resource materials that are available in the Career and Transfer Center or the counselor’s office.

Remember!! The ultimate responsibility for planning your program is yours!! There are a variety of resources at your disposal to assist you in your educational and career planning.

Withdrawal From a Class with a “W” Grade

Students may withdraw from a class after the official “drop” date and up through the fourteenth week* or 75% of the term for classes less than a semester in length. The notation “W” will appear on the student’s transcript and will not be used in the 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 CLASS(ES). Forms are available from Admissions and Records, Extended Education Centers, 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.

*This date may vary for classes of less than a full-term length.
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 insure 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 test 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.
Academic Honesty (continued):

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 only a Shasta College Associate in Arts degree and/or admissibility to a campus of the California State College or University System. (Title 5, Sections 55764, 55765). Contact the Admissions and Records Office for petition forms.

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. 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 the Scholastic Standards Committee for authorized withdrawals from their classes. Petitions are available in the Admissions and Records Office.

Privacy Rights of Students
The Family Educational Rights and Privacy Act (Section 438, Public Law 93-380) requires educational institutions to provide: Access to official education records directly related to the student; an opportunity for a hearing to challenge such records on the grounds that they are inaccurate, misleading, or otherwise inappropriate; that the College must obtain written consent of the student before releasing personally identifiable information about them from records to other than a specified list of persons and agencies; and that these rights extend to present and former students of the College.

1. Education records generally include documents and information related to admission, enrollment in classes, grades, and related information.

2. The Director of Admissions and Records has been designated “Records Officer” as required by the Act.

3. Education records will be made available for inspection and review during working hours by presently and formerly enrolled students, within 45 days following completion and filing of a request form with the Records Officer.

4. A student may challenge the accuracy of his/her educational records and request that the Records Officer make appropriate corrections. If these informal proceedings do not settle the dispute with the student’s records, the student may submit an appeal in writing to the “Designated Officer”, the Vice President of Student Services, on forms provided by the office. The “Designated Officer” will then assign the matter within ten (10) school days to a “Hearing Officer,” who is the chair of the Scholastic Standards Committee.
Privacy Rights of Student (continued):

5. During the informal proceedings, the Records Officer may make such adjustments or changes not constituting interference of integrity of professional entries. The "Hearing Officer" will set a date for the hearing at the conclusion of which he/she will render a decision to the President of the College who will make the final decision of what action is to be taken.

6. The College may release certain types of "Directory Information" unless the student submits in writing to the "Records Officer" that certain or all such information not be released without his/her consent. "Directory Information" at Shasta College includes: (1) student name and city of residence, (2) participation in recognized activities and sports, (3) dates of attendance, (4) degrees and awards received, and (5) the most recent previous educational agency or institution attended, and height and weight of members of athletic teams which may be released only by the appropriate athletic staff member or the Dean of the area.

In addition to the above stated "Directory Information," the college may also report student name, address, telephone number, date of birth, level of education, and major to the federal government, including military recruiting agencies in accordance with Public Law 104-208 and 104-206 (Solomon Amendment). Individuals requesting directory information must specify the student's complete name(s) and any other personally identifiable information that will assist the College to identify the student and research the requested information.

7. Student consent is needed for the release of any non-directory information/records covered by the Act to outside parties. For example: prospective employers, except for those agencies entitled to access under the provisions of the Act (for example: campus officials, other schools, federal educational and auditing officials, and requests in connection with the application or receipt of financial aid).

A copy of the College Board Policy 5040 and other pertinent information are available for review and inspection in the Office of the Director of Admissions and Records.

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.

Effective date – May 29, 2000

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, or economic conditions.

Student Code 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 5510, 5515, 3550.

1. Acts of dishonesty, including but not limited to the following:
   a. Cheating, plagiarism, or other forms of academic dishonesty. Academic dishonesty is the willful and intentional fraud and deception for the purpose of improving a grade or obtaining course credit, and includes all student behavior by fraudulent and/or deceptive means. The student has the full responsibility for the content and integrity of all academic work submitted.
   b. Furnishing false information to any Shasta College official, faculty member or office.
   c. Forgery, alteration or misuse of any Shasta College document, record or instrument of identification.
   d. Tampering with the election of any Shasta College recognized student organization.

2. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, other Shasta College activities including its public-service functions on or off campus, or other authorized non-Shasta College activities when the act occurs on Shasta College premises.

3. Physical abuse, verbal abuse, threats, intimidation, harassment, coercion and/or conduct which threatens or endangers the health and safety of any person.

4. 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.

5. 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.

6. 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.
Student Code of Conduct (continued):

7. Unauthorized possession, duplication or use of keys to any Shasta College premises or unauthorized entry to or use of Shasta College premises.
8. Violation of published Shasta College policies, rules or regulations.
9. Violation of federal, state or local law on Shasta College premises or at Shasta College sponsored or supervised activities.
10. Use, possession or distribution of narcotic or other controlled substances except as expressly permitted by law.
11. Public intoxication or use, possession or distribution of alcoholic beverages except as expressly permitted by law and Shasta College regulations.
12. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals on Shasta College premises.
13. 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.
14. 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.
15. Conduct that is disorderly, lewd or indecent; 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.
16. 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.
17. 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.
18. Wilful or persistent smoking in any area where smoking is prohibited by lawful authority (Board Policy, Section 3555)
19. Littering of any kind.
20. Misrepresentation of oneself or of an organization to be an agent of Shasta College.

Student Discipline Sanctions – Board Policy 5505

*Refer to the Board Policy for any current updates of language
Sanctions which may be imposed shall include the following:

1. Warning: Notice to the student that continuation or repetition of specified conduct may be cause for other disciplinary action.
2. Censure: Written reprimand for violation of specified regulations.
3. Disciplinary Probation: Exclusion from participation in designated privileges or extracurricular college activities for a specified period of time.
4. Restitution: Reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.
5. Interim Suspension: In compliance with Education Code Section 76032, students may be suspended from classes and other designated areas for a specified period of time, for the day of the removal and the next class meeting.
6. Suspension: Exclusion from classes and campus property and/or sponsored activities.
7. Expulsion: Permanent termination of student's status without possibility of readmission to the college.

Student Discipline Responsibility – Board Policy 5510

*Refer to the Board Policy for any current updates of language

1. Disciplinary Responsibility
The Director of Student Development and Information Services shall be responsible for administering the Code of Conduct. All violations of the Code shall be reported immediately to the Director of Student Development and Information Services by any person who has knowledge of the commission of any such violations. In the absence of the Director, any member of the academic staff while conducting a class, conducting a field trip, or supervising a student activity may invoke interim suspension as a sanction to maintain order.
Student Disciplinary Hearings and Review – Board Policy 5515

*Refer to the Board Policy for any current updates of language

1. Preliminary Hearing: The Director of Student Development and Information Services will conduct a preliminary hearing to determine the facts of any alleged violation of the Code of Conduct. This hearing shall be carried out within 48 hours or two school days of notification of the alleged violation.

2. Disciplinary Hearing: After the preliminary hearing, the Director of Student Development and Information Services will hold a second hearing within 48 hours or two (2) school days which shall establish the disciplinary action to take place. During this hearing, the Director will review the evidence compiled in the preliminary hearing and will impose those sanctions that he/she deems appropriate. The Director will inform the student charged with misconduct the reason for the charge of misconduct together with a description of the sanction imposed. He/she will further inform the student of his/her right to appeal to the appropriate administrator.

The Director of Student Development and Information Services shall ensure that the best interests of any student charged with an offense are served, recognizing the student's primary need to sustain academic progress. The Director may recommend appropriate professional counseling services where the mental or physical health of the student may have been a contributing factor in the misconduct.

3. Appeal Procedure: After being informed in writing by the Director of Student Development and Information Services, it will be the student's responsibility to request in writing a hearing before the appropriate administrator regarding his/her appeal within three (3) school days. If the student does not appeal, the decision of the Director of Student Development and Information Services will be final. If the student elects to appeal, the sanction imposed will be suspended until the time of the hearing.

4. Administrative Review: The appropriate administrator, upon written appeal from the student, will review the findings in the disciplinary action and the sanctions imposed. The appropriate administrator may modify the sanctions as imposed by the Director of Student Development and Information Services.

5. Mandatory Review of Extreme Sanctions: On the recommendation of the District Superintendent/President, the Board may review any disciplinary sanction. When suspension or expulsions are imposed as sanctions, the Board will review all suspensions and recommendations for expulsion.

6. Cooperation with Law Enforcement Agencies: The Director of Student Development and Information Services shall cooperate fully with state and federal law enforcement agencies in the investigation and enforcement of state and federal law within the limitations imposed by statute assuring students of the right to privacy.

Student Grievance Policy – Board Policy Sections 5425

*Refer to the Board Policy for any current updates of language

DEFINITION: For the purpose of this policy a student grievance is an assertion or claim by a student or applicant for admission that a particular rule, or set of rules, established by a local, state or federal law or regulation, or contractual agreement has been violated by the institution and/or its representative(s).

FIRST LEVEL: Any student or applicant for admission with a grievance should first attempt to resolve the problem with the appropriate activity or program staff.

SECOND LEVEL: If the grievance cannot be resolved with staff as specified at the first level within ten (10) working days, the grievant should contact the immediate supervisor.

THIRD LEVEL: If the grievance cannot be resolved at the second level within ten (10) working days, the grievant should contact the college President, Vice President of Academic Affairs, Vice President for Student Services, or Vice President of Administrative Services, as appropriate. The Vice President, as appropriate, will review the grievance with the supervisor or administrator and attempt to resolve the grievance informally.

If the grievance cannot be resolved informally, the grievant will be asked to state the grievance in writing and a formal hearing will be scheduled within ten (10) working days of receipt of the written complaint. A staff member being grieved shall have the opportunity to respond in writing. The Vice President, as appropriate, will conduct the hearing.

The hearing will include the grievant(s) and the person(s) toward whom the grievance is directed. 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 party to the hearing. The Vice President, as appropriate, shall have five (5) working days after the hearing to render a written decision.

FOURTH LEVEL: If the grievance cannot be resolved at the third level within fifteen (15) working days, the grievant may seek a review with the College Superintendent. A copy of the stated grievance and minutes of the hearing, if any, will be submitted to the Superintendent for review. The Superintendent shall have ten (10) working days to render a written decision.

FIFTH LEVEL: If the grievance cannot be resolved at the fourth level within ten (10) working days, the grievant may seek a review before the College Board of Trustees at its next regularly scheduled meeting.

Note: A record of the grievance may only be entered into a classified staff member's personnel file in compliance with Article 5.3 of the Classified Employee's Contract. A record of the grievance may only be entered into a certificated staff member's personnel file in compliance with Article 5.11 of the Academic Employee's Contract. A record of the grievance may only be entered into a student's cumulative file at the student's request.
**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 500) and Sanctions (BP 5505), available for reference in the College Catalog or by requesting a copy from Student Services.

Access to computing resources is a privilege. Use of any Shasta College computer system constitutes agreement to comply with Shasta College Administrative Procedures for Responsible Computing. Computer technology and facilities are provided for the purpose of completing academic requirements. The District may access, review, copy and disclose information entered or retained in computer technology and communications resources.

A. Students may use the technology and facilities to:

1. Complete course assignments;
2. Conduct academic research;
3. Communicate with faculty and students.

B. User Responsibilities. User responsibilities include, but are not limited to:

1. 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;
2. Using software and electronic materials, including shareware, in accordance with copyright, trademark, and licensing agreements and restrictions;
3. Accurately identifying and representing themselves in electronic messages, files, and transactions;
4. 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;
5. 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;
6. Asking appropriate Shasta College personnel for assistance if unfamiliar with the system software.

C. Prohibitions. Prohibitions include, but are not limited to:

1. Circumventing or attempting to circumvent local, network, or remote security measures;
2. Unauthorized use of accounts, access codes, passwords, or identification numbers;
3. Violating copyrights, trademarks, and/or license agreements;
4. 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;
5. 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;
6. Falsely identifying and/or representing oneself in the use of computer technology and communications resources.
7. Altering or attempting to alter system software;
8. Altering or attempting to alter system hardware without Technology Support approval;
9. 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);
10. Modifying or attempting to crash or hack into computer technology or communications resources;
11. Accessing or attempting to access restricted portions of any operating system or security software;
12. Installing or removing software;
13. Using computer technology and/or communications resources for private commercial purposes;
14. 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 Services and Activities

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.

Associated Student Body (ASB)

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 Associated Student Body offices located in the Campus Center or by phoning (530) 225-4743, or (530) 225-4711.

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 Associated Student Body (ASB). Funds from the card help ASB in financing the annual homecoming, dances, concerts, Spring Activities Week, and Huck Finn Day. The card allows reduced admission to various ASB sponsored activities. An activity card may be purchased each semester. Information will be available during registration or at the ASB offices located in the Campus Center. This card is your passport that will help to involve you in college activities.

STUDENT BLOOD FUND
The Student Blood Fund is monitored by the ASB for use by students during emergency situations requiring blood. This service is provided free of charge and gives students of the college free access to needed units of blood. Blood drives are held throughout the year on campus. Students are urged to support them with a life-giving donation.

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 ASB. 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 Office of Student Development and Information Services for dates and times.

For the most part the ASB focuses its attention in three main areas of concern: student needs and concerns, campus activities and student services.

Shasta College students may participate in the Associated Student Body. Students are elected and/or appointed to positions in the various levels of the ASB. The development of leadership qualities through participation is considered to be of prime importance in the student self-government program at the College.

STUDENT NEWSPAPER
The college journalism classes publish a newspaper, The Lance. For more information, contact The Lance office at (530) 225-4744.

Bookstore

The College Bookstore provides essential products and services that complement the academic environment and facilitate the education process for students, faculty, staff, and alumni as well as to visitors to Shasta College. The Bookstore offers self-service and selection in specialized book departments. Several non-book departments, such as school supplies, food products, emblematic wear, sundries, and gifts are also offered.

The Bookstore is open to the public throughout the school year. The team members of the Bookstore look forward to meeting many of you personally and helping you become better acquainted with the products and services offered. It is our purpose to make your visits to the Bookstore a pleasant and beneficial experience.

During the beginning of each semester the Bookstore has extended hours. Refer to the class schedule, our web page, or please call (530) 242-7574 for more information.

Textbooks can be ordered online at www.shasta.bkstr.com

CalWORKs

CalWORKs is a federally mandated program designed to assist parents who are receiving Temporary Assistance to Needy Families (TANF), formerly AFDC. The goal is to assist these parents in gaining employment by providing vocational training and/or remedial education. Supportive services may include academic counseling, child care assistance, and a work-study program that enables CalWORKs students to meet work activity requirements, gain work experience and earn money that will not impact their grant. Shasta College serves Shasta, Tehama and Trinity students. Shasta College CalWORKs Counselors are available for counseling in locations in each of the three counties. Call (530) 225-3949 for additional information or come by the Shasta College CalWORKS office at the Downtown Mall, 1435 Butte Street, Redding. We’re located just across the street from the Shasta County Department of Social Services (DSS) CalWORKs office at 1400 California Street.

Career and Transfer Center

As part of the counseling function, Shasta College operates a Career and Transfer Center. Located adjacent to the counseling offices in the Administration Building, the Center is a resource for students and the community to use in making career decisions, acquiring occupational information, and learning about four year colleges and universities. It houses a library of occupational information, computerized career exploration programs, and career interest assessments and college/university catalogs. The Career and Transfer Center also offers workshops on selecting an appropriate transfer college and the process of transfer to UC, CSU, and independent colleges. The center sponsors visits to four-year universities each semester. It also hosts admission advisors from four year institutions who meet with students here at Shasta College. The community and students are invited to make use of the variety of materials and counseling services available. For additional information or an orientation call (530) 225-4924 or 225-4935 or drop by Room 125.
CARE - Cooperative Agencies Resources for Education

The CARE Program is designed as a support service for the EOPS student who is at least 18 years of age and a single head of household, a current recipient of TANF/CaWORKs, has a child under 14 years of age, and is enrolled full-time upon admission into the program. Support services provided for CARE students may include assistance with childcare or transportation expenses, supplies, workshops and referrals. The purpose of the program is to assist the CARE student in pursuing educational goals and obtain job/career skills leading to meaningful employment. For additional information, call (530) 225-4819 or visit the CARE Office in the Student Center.

Child Care Services

Shasta College Children’s Campus offers several options to help meet the childcare and educational needs of families. The Early Childhood Education Center (225-4734) is a demonstration child development laboratory site providing an enrichment experience for 3, 4, and 5-year old children. A minimum childcare fee is charged and set by the Board of Trustees. Shasta County Head Start and Early Head Start (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.

Cultural Activities and Athletics

ART

The Art Department sponsors monthly exhibitions in the College Gallery showing visiting artists, faculty, and a juried student show in May. The realm of art is a viable medium at Shasta College, one that fulfills the aspirations and artistic inclinations of each student. For additional information, call (530) 225-4688.

ATHLETICS

Shasta College, a member of the Golden Valley Conference, Northern California Football Conference, and the Bay Valley Conference, offers a strong and varied athletic program for men and women. The athletic facilities include a gymnasmium, a lap swimming pool and a diving pool, lighted tennis courts, weight training room, a cardio exercise room, well-lighted football stadium, archery range, all-weather track and field facility, baseball and softball diamonds, and soccer fields. Shasta College men and women participate in basketball, baseball, cross-country, football, golf, soccer, softball, swimming and diving, tennis, track and field, volleyball and wrestling. Questions regarding athletic eligibility should be directed to the Athletic Director, (530) 245-7337 or the Athletic Counselor (530) 225-4984, or check our website at http://web1.shastacollege.edu/athletics/

MUSIC

The Music Department offers a wide range of musical opportunities that include workshops, clinics, guest performers, musicals, and concerts. The Concert Choir, Vocal Jazz Ensemble, String Ensemble, Wind Ensemble, and Jazz/Rock Ensemble perform for many clubs, schools and activities in the area, as well as performing concerts in the Shasta College Theatre. Evening classes offer opportunities to participate in the Community Symphony Orchestra or Community Chorale, Community Concert Band and Community Jazz Big-Band. 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) 225-4761.

THEATRE ARTS

The Theatre Arts Department offers a variety of theory, production and technical theatre classes. The department features two mainstage 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 involvement is very welcome. For additional information, call (530) 225-4761.

Services for Students with Disabilities

Shasta College offers students with disabilities numerous services including counseling and academic advisement, testing for learning disabilities, readers, tutors, note providers, brailled texts, taped 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 821, is available for qualifying students with disabilities. For students with developmental challenges, targeted courses and supports are provided through the Transition Services component of the Disability Resource Center. For more information on the various programs and services available through the Disability Resource Center, please call (530) 225-3973 or stop by our office, which is located in the Campus Center.

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. The services available to students may include book service awards, EOPS emergency loans, tutoring, academic, personal and career counseling, EOPS transfer assistance, child care assistance, workshops, cultural events and referrals to both on- and off-campus programs. Eligibility for services is determined (under Title 5 regulations) by students filing for a BOGG (Board of Governors Grant) and completing an EOPS application form. For additional information, or for EOPS counseling appointments, call (530) 242-7540 or come to the EOPS Office in the Campus Center.

Financial Aid/Scholarships

(530) 242-7700 Room 108

FINANCIAL AID

Shasta College has an extensive financial assistance program designed to assist you if you are unable to pursue your education without such help. Grants, loans, part-time employment and scholarships are available to meet the difference between what you and your family should reasonably be expected to provide, and the expected cost of attending Shasta College.

In determining the type and amount of financial assistance necessary to meet a financial deficit, the college, in keeping with regulations governing the administration of federal financial aid programs, expects the parents to make maximum effort to assist their sons and daughters with college expenses. It is anticipated that each student also should contribute toward his/her education costs.
Financial Aid/Scholarships (continued):

The financial contribution from the college should be viewed only as supplementary to the financial resources of the applicant and his/her family. See the Shasta College website for complete information.

ABILITY TO BENEFIT STUDENT

The Higher Education Technical Amendments of 1991 (Public Law 102-26, enacted April 9, 1991) made several changes that affect the student financial assistance programs authorized by the Higher Education Act of 1965, as amended (HEA). This law mandates new student eligibility requirements for students not possessing a high school diploma or equivalent who seek Title IV student financial assistance. Section 484(d) of the HEA requires for periods of enrollment beginning on or after July 1, 1991 that in order to be eligible to receive Title IV aid, a student who lacks a high school diploma or its equivalent must pass an independently administered test approved by the Secretary of Education.

A student enrolling at Shasta College and applying for financial aid who does not have a high school diploma, GED or high school proficiency certificate must achieve a specific score on the test. Because of this federal law, the college cannot fund anyone without a high school diploma or equivalent or the appropriate score on a U.S. Department of Education approved test. Please contact the Financial Aid Office for additional information.

SCHOLARSHIPS

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

IMPORTANT DATES TO REMEMBER

March 2  Priority filing date for financial aid. After this date funds are awarded on a first-come, first-served basis.
August 15  Fall scholarship applications available.
October 3  Deadline for Fall scholarship applications.
December 1  Spring scholarship applications available.
February 15  Deadline for Spring scholarship applications.

Please note: Emergency registration/books loans are available for students who qualify.

Health and Wellness Services

Student Health/Wellness Services is located in the Campus Center Building. Refer to the schedule of classes for hours. During the Fall and Spring Semesters appointments can be made to see the nurse, family planning services, or the psychological counselor. Besides assisting with minor first aid, health issues, and community referrals, Health/Wellness Services has a multitude of information on lifestyle, nutrition and exercise. For more information on Health Services, please call (530) 225-4627 or visit http://www3.shastacollege.edu/wellness/.

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 3.4 and have completed 12 or more transferable units, courses numbered 1-99 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 advisors Joan Adams by e-mail, or stop by Room 2313 (the Office of the Vice President of Student Services) on the main campus for brochures and a membership application, or visit the chapter web site at http://www3.shastacollege.edu/ptk.

Housing

Shasta College maintains two dormitories, one for 60 women and one for 60 men. A commons building providing recreational space and equipment for both indoor and outdoor activities is part of the facility. A full range of social and recreational activities is programmed monthly for the enjoyment of the residents. Students must carry and maintain satisfactory progress in at least 12 units to remain in the dorms.

Students are advised to apply early. Applications must be accompanied by a refundable deposit. A brochure giving information about the dormitories is available from the Admissions and Records Office. For additional information on the Shasta College dormitories phone (530) 225-4824 or (530) 225-4822.

Students receiving financial aid, upon acceptance, must pay any difference between the amount of the grant and actual dormitory contract before entering the dorms.

Meals may be purchased by students in the cafeteria/snack bar during regular school hours. Snack, soft drink, and hot food machines are available in the commons building.

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.
Learning Resource Center
(LRC - Library)

It's easy to get the needed information at the state-of-the-art College Library. We're no longer just a building with books and magazines. Most resources and many services are available on-line, 7 days per week, 24 hours per day. Explore the vast spectrum of knowledge. The LRC offers the following:

♦ Millions of magazine articles from 5,000 world-wide publications
♦ 100,000 books, videos, films, government documents, audiotapes, etc
♦ 80 computer, video, microform and other workstations, most with ultra-high-speed Internet connections
♦ Friendly, service-oriented staff to help you get started and deal with any research problem encountered
♦ Air conditioned study space
♦ Numerous special resources for the physically challenged

Visit the LRC during the hours listed below or anytime via the Internet at: http://library.shastacollege.edu

LRC HOURS:
Monday through Thursday 7:45 a.m. to 8:45 p.m.
Friday 7:45 a.m. to 3:45 p.m.
Saturday/Sunday Closed

Call 225-4777 for Holiday and Summer hours or check the LRC website

Student Employment Services

The Student Employment Center is a resource for students seeking work while attending classes at Shasta College. Staff also assists students in obtaining employment after graduation or at the completion of their training program. Bulletin boards are maintained in major campus buildings listing current job openings and internship opportunities both on and off campus. Job listings are also posted on the Student Employment website (www3.shastacollege.edu/employment). Computers, printers, fax and phone are provided for job search purposes. Resume, cover letter, interviewing and general job search assistance is available. For more information on student employment services, please stop by Room 124 or call (530) 225-4738.

TRIO – Student Support Services
(530) 225-3929

Student Support Services is a federally funded TRIO program for eligible full-time students who are preparing to transfer to four-year universities to earn a Bachelor’s Degree. TRIO-SSS provides support services (tutoring, counseling, lending library, calculator loans, orientation, and workshops), cultural and social activities, university tours, and transfer assistance. For additional information visit the TRIO office, Room 2070, in the Campus Center.

Transportation

Both private (Shasta College) and public transportation are provided for students attending Shasta College as follows: Shasta College Transportation provides services to Red Bluff, Corning, Los Molinos, Weaverville and points in between at scheduled stops. Busses arrive and depart from Shasta College’s north parking lot, arriving at Shasta College at approximately 8 a.m. and departing 2:00, 4:00 and 4:30 p.m. For further information regarding fees and for confirmation of schedules, call (530) 225-4817.

PUBLIC CARRIERS

Public transportation (The Ride) for the greater Redding area arrives and departs from Shasta College’s north parking lot, arriving at Shasta College on the hour and departing five (5) minutes after the hour. The Ride is in operation beginning at 6:30 a.m. to 7:30 p.m., Monday through Friday and from 9:30 a.m. to 7:30 p.m. on Saturday. For further information, call (530) 241-2877.

Tutorial Services

The Shasta College Writing Center, located upstairs in the Learning Resources (Library) building is a resource for all writers. Students from all courses, as well as community members, are encouraged to make an appointment to work with a tutor in a one-on-one, write to writer tutoring session. The Writing Center also provides computers for word processing and research purposes, and offers workshops and resources for writers. The college also provides tutoring in Math and Science. Please check with center offices for tutoring services available in various subject matter areas.

UTRAC (formerly University Express) – Room 126B

University Transfer Readiness and Completion (UTRAC) is a program designed for motivated, academically prepared high school seniors whose primary goal is to transfer to a four-year university or college. There will be opportunities to interact with faculty mentors and visiting presenters. Students apply in February for admission to Shasta College for the following fall. They receive assistance with educational planning which, in most cases, prepares them to transfer within two years. For more information, please ask your high school counselor or call Shasta College at 225-4933.

Veterans Educational Benefits

The Admissions and Records Office serves as your liaison between the school and the Veterans Administration to help you apply for educational benefits. We provide support to help you with your education and information on the latest programs, extension of delimiting dates, vocational rehabilitation, etc. Be sure to apply early. It takes the Veterans Administration approximately 90 days to process the paperwork.

All new veterans to Shasta College should call for information at (530) 242-7662 or visit the Admissions and Records Office.
California Nonresident Tuition Exemption

FOR ELIGIBLE CALIFORNIA HIGH SCHOOL GRADUATES
(The law passed by the Legislature in 2001 as “AB 540”)

GENERAL INFORMATION

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

• Requirements:
  o The student must have attended a high school (public or private) in California for three or more years.
  o 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).
  o 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. General information is available at: www.ucop.edu/sas/sfs/Programs_and_Policies/ab540faqs.htm. 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.

Revised October 2003
California Nonresident Tuition Exemption Request
FOR ELIGIBLE CALIFORNIA HIGH SCHOOL GRADUATES

SHASTA COLLEGE ADMISSIONS AND RECORDS OFFICE – PO Box 496006 – Redding, CA  96049-6006

Note: 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) __________________________________________ and I declare the following:

Check YES or NO boxes:

☐ Yes  ☐ No I have graduated from a California high school or have attained the equivalent thereof, such as a High School Equivalency Certificate, issued by the California State GED Office or a Certificate of Proficiency, resulting from the California High School Proficiency Examination.

☐ Yes  ☐ No I have attended high school in California for three or more years.

Provide information on all school(s) you attended in grades 9 - 12:

<table>
<thead>
<tr>
<th>School</th>
<th>City</th>
<th>State</th>
<th>Dates:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>From – Month/Year</td>
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</tbody>
</table>

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:

☐ 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

☐ I am NOT a nonimmigrant alien. [U.S. citizens, permanent residents, or aliens without lawful immigration status, among others, should check this box.]

AFFIDAVIT:

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

Print Full Name (as it appears on your campus student records)  Campus/Student Identification Number

Print Full Mailing Address (Number, Street, City, State, Zip Code)  Email Address (Optional)

Phone Number (Optional)

Signature  Date

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

Revised October 2003
Associate Degrees

Shasta College awards both the Associate in Arts degree and the Associate in Science degree. The pattern of course offerings at Shasta College is designed to be as flexible as possible in meeting individual student needs. Students may enroll in courses for which they qualify without any formal diploma or degree goals. Students have the following options available: Associate in Arts degree, Associate of Science degree, or certificate of completion.

Upon completion of the following requirements a student at Shasta College will be granted an Associate Degree. Responsibility for filing an application for graduation rests with the student and all transcripts for high school and prior college work attempted must be on file for the application to be considered. Both state and local requirements for the degree are listed below. Students at Shasta College have the opportunity to prepare for transfer to a four-year institution in virtually any major offered by those colleges or universities.

I. UNIT REQUIREMENT - At least sixty (60) semester units of course work.

II. SCHOLARSHIP REQUIREMENT - An overall grade point average of not less than 2.00 ("C" average) based on all college work attempted.

III. 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.

IV. COURSE REQUIREMENTS -
   A. Major Field of Study: Select Associate in Arts or Associate in Science degree program.
   B. General Education: 21-39 units. Select either Associate, CSU, or IGETC pattern from the following pages.

V. COMPETENCY GRADUATION REQUIREMENTS – Complete English and math requirements on page 43.

The Associate in Arts degree
The AA degree is a liberal arts degree. It is designed for the student who wishes to complete lower division requirements in preparation for transfer to a four-year public or private university.

Shasta College offers several AA degrees that prepare students to transfer:

1. AA – Transfer General Education: A total of 60 units are required. Fifty-six of these sixty units must be transferable units (courses numbered 1-99), including ENGL 1A and 30 units of general education courses from the CSU or IGETC general education patterns. (Must include the 21 unit associate GE pattern.)

2. AA – University Studies: A total of 60 units are required including completion of IGETC or the CSU GE pattern with C’s or better in specific courses, and a transferable GPA of 2.0 or better. See page 44 for complete requirements.

3. Transfer AA Majors: (Students complete the major and the 33-39 unit CSU or IGETC general education plan)
   - Art
   - Communication Arts
   - Environmental Horticulture
   - Journalism
   - Music
   - Theatre Arts

Note: Students also transfer in many other majors by completing the AA’s (#1 and #2) above, and the major preparation courses listed at www.assist.org

The Associate in Science degree
The AS degree is primarily oriented to technical, science, and occupational programs. It is intended for the student who plans to enter the workforce after completion of the two-year degree or for transfer majors in math, engineering, or sciences.

Shasta College awards the Associate in Science degree for the occupational majors listed below. While these programs may include transferable courses, they are designed to provide the necessary skills that prepare students to enter the workforce. Students planning to transfer should complete one of the Associate in Arts degrees listed above or meet with a counselor to determine the additional courses necessary for transfer.

- Administration of Justice
- Agriculture
- Automotive Technology
- Business Administration
- Accounting Concentration
- General Business Concentration
- Management Concentration
- Real Estate Concentration
- Civil Engineering Technology
- Computer Aided Drafting (CAD) Technology
- Computer and Information Systems
- Business Information Systems Concentration
- Computer Networking Concentration (CCNA Option)
- Computer Networking Concentration (CCNP Option)
- Construction Technology
- Dental Hygiene
- Diesel Technology
- Early Childhood Education
- Equine Science
- Family Studies
- Fire Technology
- General major
- Horticulture Management
- Hospitality Management
- Culinary Arts Concentration
- Hotel/Restaurant Management Concentration
- Legal Assistant
- Natural Resources
- Nursing – Associate Degree Nursing
- Office Administration
- Administrative Assistant
- Administrative Assistant – Legal
- Information Processing Specialist
- Medical Office Specialist
- Transcriptionist - Medical
- Veterinary Technician
- Welding Technology

*The General major is an option for the student who desires to customize a major to meet personal interests or goals. It requires completion of an 18-unit major in a single discipline or related disciplines. See a counselor for the list of related disciplines.
Certificates

Please refer to the following pages for details on the certificates listed below:

Accounting Clerk/Bookkeeper
Automotive Engine Performance/Smog Technician
Automotive Machine
Automotive Technology
Business Administration- Entrepreneurship
Civil Engineering Technology
Computer Aided Drafting (CAD) Technology
Computer & Information Systems
  Computer Networking (CCNA)
  Computer Networking (CCNP)
Computer Maintenance
Construction Technology
Customer Service Academy
Diesel Technology
Dietary Service Supervisor
Early Childhood Education
ECE-Family Childcare
Equine Science
Equipment Operations and Maintenance
Firefighter I Cert Program
Firefighter II Cert Program
Fire Technology-Wildland Firefighter 1 Academy
Geographic Information Systems
Gerontology – currently suspended
Horticulture
Horticulture – Master Floral Design
Horticulture – Irrigation
Horticulture – Landscape and Turf Management
Horticulture – Retail Nursery Sales
Hospitality – Baking – Culinary Arts Emphasis
Hospitality – Bartender – Culinary Arts Emphasis
Hospitality – Dining Room Management – Culinary Arts Emphasis
Hospitality – Dining Room Staff – Culinary Arts Emphasis
Hospitality – Line Cook – Culinary Arts Emphasis
Hospitality - Winemaking and Marketing
Hospitality Management
  Casino Management
  Culinary Arts
  Hotel/Restaurant Management
Industrial Technology
Journalism
Life Management
Music
Natural Resources
Nurse Aide/Home Health Aide
Nursing-Vocational Nursing
Office Administration
  Clerical Assistant
  Info Processing Specialist
  Medical Billing Specialist
  Records Manager
  Transcriptionist - Medical
Real Estate
Residential Care Counselor Training – currently suspended
Retail Management
Theatre
Transition Certificate for Students with Intellectual Disabilities
Watershed Restoration
Water/Wastewater Treatment
Welding Technology
**2006-2007**

**Associate Degree – General Education**

**General Education - 21 units  (plus a major field of study = 60 units)**

General education courses are designed to broaden the knowledge of students, increase their ability to reason clearly and critically, build speaking and writing and quantitative skills, and expose them to different modes of thinking about themselves and the community. These courses are designed to increase an understanding of the natural world, build knowledge of the social world, and foster an appreciation of arts and culture. Just as the main purpose of course work aimed at developing employment skills is to prepare students to work productively, then the main purpose of general education is to prepare them to be better informed, more skilled citizens—productive not only in the workplace, but also in the community and within the family. The goal is a more well-rounded, responsible individual: healthy in mind and body, tolerant of divergent points of view, able to think rationally and openly, and competent to adapt to a changing world.

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. A four (4) quarter unit course is deemed equivalent to a three (3) semester unit course.

### 1. NATURAL SCIENCE—Those which examine the physical universe, its life forms and its natural phenomena.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 19</td>
<td>Animal Sci.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 60</td>
<td>Biol of Aging</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>GEOL 5</td>
<td>Intro Geology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHSC 1</td>
<td>Phys Sci Surv</td>
<td>3</td>
<td>Or select 3 units from</td>
</tr>
<tr>
<td>AGRI 20</td>
<td>Plant Sci</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BOT 1</td>
<td>Botany</td>
<td>1</td>
<td>Bot 50</td>
</tr>
<tr>
<td>ANAT 1</td>
<td>Anatomy</td>
<td>4</td>
<td>Meteorology</td>
</tr>
<tr>
<td>CHEM 1AB</td>
<td>Gen Chem</td>
<td>3</td>
<td>Geol of CA</td>
</tr>
<tr>
<td>ANTH 1 Phys</td>
<td>Anthropo</td>
<td>3</td>
<td>Geol 8 Planetary Geol</td>
</tr>
<tr>
<td>CHEM 2AB Int</td>
<td>Intro Chem</td>
<td>4</td>
<td>Geol 8 Planetary Geol</td>
</tr>
<tr>
<td>ASTR 1</td>
<td>Astronomy</td>
<td>3</td>
<td>Oceanography</td>
</tr>
<tr>
<td>CHEM 6</td>
<td>Chem Enviro</td>
<td>3</td>
<td>Geol 9 Earthquakes</td>
</tr>
<tr>
<td>BIOL 1 Prin</td>
<td>Biol of Chem</td>
<td>3</td>
<td>Geol 10 Envir Geology</td>
</tr>
<tr>
<td>BIOL 5</td>
<td>Human Biol</td>
<td>3</td>
<td>Env Hort</td>
</tr>
<tr>
<td>BIOL 10 Gen Biol</td>
<td>ENVR 24 Soils</td>
<td>3</td>
<td>Microbiology</td>
</tr>
<tr>
<td>BIOL 11 Div</td>
<td>Life of Biol</td>
<td>3</td>
<td>Geol 4 Envir Geology</td>
</tr>
<tr>
<td>BIOL 12 Field</td>
<td>Biology</td>
<td>3</td>
<td>Natural History</td>
</tr>
<tr>
<td>BIOL 14 Heredity</td>
<td>GEOG 1A Env Phy Geog</td>
<td>3</td>
<td>Geog 6 Water Resources</td>
</tr>
<tr>
<td>BIOL 15 Entomol</td>
<td>GEOL 1 Phy Geology</td>
<td>3</td>
<td>Geog 6 Energy &amp; Envir</td>
</tr>
</tbody>
</table>

### 2. SOCIAL AND BEHAVIORAL SCIENCES— Those which focus on people as members of society.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 10</td>
<td>Intro to AOJ</td>
<td>3</td>
</tr>
<tr>
<td>ECON 17 Econ History</td>
<td>HIST 17ABU History</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2 Cult</td>
<td>Culture Anth</td>
<td>3</td>
</tr>
<tr>
<td>FSS 16</td>
<td>Marriage Family</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 5</td>
<td>Man/Cult./Ecol</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 14 Relig,Myst,Ritual</td>
<td>FSS 60 Life Management</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 25 Cult. Hist Indian</td>
<td>GEOG 1A Env Phy Geog</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3 Prin</td>
<td>Arch</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4A</td>
<td>Field Arch</td>
<td>3</td>
</tr>
<tr>
<td>ECE 1 Human</td>
<td>Develop</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2 Child</td>
<td>Child Fam Comm</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1/AB Economics</td>
<td>HIST 2 World Civilization</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2 Ecoun Issues</td>
<td>HIST 3 World Civilization</td>
<td>3</td>
</tr>
</tbody>
</table>

### 3. HUMANITIES—Courses in the humanities are those which study the cultural activities and artistic expressions of human beings.

To satisfy the general education requirement in the humanities, a course shall be designed to help the student develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them in artistic and cultural creation and help the student develop aesthetic understanding and an ability to make value judgments. Such courses could include introductory or integrative courses in the arts, foreign languages, literature, philosophy, and religion. Three (3) units required.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1 Intro to Art</td>
<td>ENGL 14 Drama as Lit</td>
<td>3</td>
</tr>
<tr>
<td>ART 2 Hist of Art</td>
<td>ENGL 15 Lit Women</td>
<td>3</td>
</tr>
<tr>
<td>ART 3 Hist</td>
<td>Art</td>
<td>3</td>
</tr>
<tr>
<td>ART 4 Ethnic Art World</td>
<td>ENGL 17 Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>ART 6 Hist/Modern Art</td>
<td>ENGL 18 Afric Amer Lit</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1B &amp; Comp</td>
<td>ENGL 19 Bible as Lit</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 10AB World Lit</td>
<td>ENGL 24 Multicult Persp</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 11/AB Survi/Am. Lit</td>
<td>ENGL 25 Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 12 Short Fiction</td>
<td>ENGL 31 Creative Writ</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 13A/B Surv Eng Lit</td>
<td>ENGL 33 Fiction and Film</td>
<td>3</td>
</tr>
</tbody>
</table>

### 4. LANGUAGE AND RATIONALITY—Courses in language and rationality are those which develop for the student the principles and applications of language toward logical thought, clear and precise expression and critical evaluation of communication in whatever symbol system the student uses.

#### a. English Composition—Courses fulfilling the written composition requirement shall be designed to include both expository and argumentative writing. Three (3) units required.

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ENGL 190 Reading &amp; Writing II</td>
<td>BUAD 166 Business English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A Reading &amp; Comp.</td>
<td>ENS 138 Composition II</td>
<td>2</td>
</tr>
<tr>
<td>BUAD 66 Business Communication</td>
<td>ENGL 191 Writing in the Workplace, plus</td>
<td>2</td>
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</tbody>
</table>

#### b. Oral Communication—Instruction approved for fulfillment of the oral communication requirement emphasizes the form of communication as well as the form. Emphasis is placed on 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. Three (3) units required.

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 20 Intercomm.</td>
<td>SPCH 40 Argument/Debate</td>
<td>3</td>
</tr>
</tbody>
</table>
c. Analytical Thinking—Courses fulfilling the analytical thinking requirement include mathematics, logic, statistics, computer languages and programming and related disciplines. Students typically choose a mathematical course to meet their math competency requirement at the same time. Three (3) units required. See Math Competency Requirement listed below

### AS Level Math:
- BUAD 106 Business Math
- MATH 100 Tech. Applic. of Mathematics
- MATH 101 Basic Algebra
- MATH 110 Essential Math

### Other Math Courses:
- MATH 10Z Inter Algebra
- MATH 2 Precalculus
- MATH 3AB Calculus
- MATH 8 Finite Mathematics
- MATH 9 Survey of Calculus
- MATH 10 Trigonometry
- MATH 11 Patterns of Math
- MATH 13 College Algebra
- MATH 14 Statistics
- MATH 41AB Conc./Elem Math

### Other acceptable courses (if math competency has been satisfied):
- BUAD 46 Human Relations Job
- ENGL 18 Literature and Comp
- ENGL 1C Crit Reasoning Writing
- CIS 1 Computer Literacy
- CIS 2 Intro Computer Science
- CIS 61 C++ Programming
- PHIL 7 Ethics Personal Values
- PHIL 8 Logic

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5. MULTICULTURAL/LIVING SKILLS—Those which encourage lifelong understanding. These courses prepare students to live and work in an increasingly multicultural environment or encourage development as integrated physiological, social and psychological beings. Three (3) units required, from either area.

### MULTICULTURAL COURSES:
- ANTH 2 Cultural Anth
- ANTH 25 Culture/NA Ind
- ART 4 Ethnic Art World
- ENGL 18 African Am. Lit
- GEG 1B Cultural Geog
- GEG 7 California Geog
- HIST 25 African Am. History
- HIST 36 History/Far East
- HIST 50 History of Africa
- POLS 20 Politics 3rd World Nations
- PSYC 41 Cultural Social Childhood
- SOC 28 Sociology of Minorities
- SPCH 20 Intercultural Commun.

### LIVING SKILLS:
- BUAD 10 Intro./Business
- BUAD 45 Hum. Rel./Job
- BUAD 106 Business Math
- ECE 1 Human Develop.
- ECE 2 Child/Family/Comm
- MATH 100 Tech. Applic. of Mathematics
- MATH 101 Basic Algebra
- MATH 110 Essential Math
- MATH 10Z Inter Algebra
- MATH 2 Precalculus
- MATH 3AB Calculus
- MATH 8 Finite Mathematics
- MATH 9 Survey of Calculus
- MATH 10 Trigonometry
- MATH 11 Patterns of Math
- MATH 13 College Algebra
- MATH 14 Statistics
- MATH 41AB Conc./Elem Math

### OR select a two-unit course and a one-unit course below:
- HIST 25 African Am. History
- HIST 36 History/Far East
- HIST 50 History of Africa
- HIST 20 Pol Sci Intern
- HIST 36 History of the World

### Other acceptable courses (if math competency has been satisfied):
- BUAD 46 Human Relations Job
- ENGL 18 Literature and Comp
- ENGL 1C Crit Reasoning Writing
- CIS 1 Computer Literacy
- CIS 2 Intro Computer Science
- CIS 61 C++ Programming
- PHIL 7 Ethics Personal Values
- PHIL 8 Logic

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### COMPETENCY GRADUATION REQUIREMENTS--A.A./A.S. DEGREE

In order to receive an Associate Degree from Shasta College, the student must demonstrate competence in reading, in written expression, and in mathematics.

**A.** Competence in reading and in written expression is demonstrated by a grade of “C” or higher in one of the following courses:
- ENGL 1A
- BUAD 166
- ENGL 101 Writing in the Workplace, plus two
- ENGL 1B
- BUAD 166
- ESL 138

**B.** Competence in mathematics is demonstrated by one of the following criteria:
1. A grade of "C" or higher in a mathematics course listed from 1-199 (including INTR 15) OR one of the following courses:
   - BUAD 106
   - MATH 100
   - MATH 110

2. Performance at or above the level specified below on the following examinations:

<table>
<thead>
<tr>
<th>Examination</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Board Advanced Placement Math Test (AB or BC)</td>
<td>3</td>
</tr>
<tr>
<td>Scholastic Aptitude Test - Mathematics (SAT-M)</td>
<td>520</td>
</tr>
<tr>
<td>American College Testing (ACT) – Math</td>
<td>23</td>
</tr>
<tr>
<td>College Board Math Achievement Test, Level 1</td>
<td>520</td>
</tr>
<tr>
<td>College Board Math Achievement Test, Level 2</td>
<td>540</td>
</tr>
<tr>
<td>Elementary Algebra Diagnostic Test</td>
<td>26</td>
</tr>
<tr>
<td>COMPASS Algebra Test</td>
<td>39</td>
</tr>
</tbody>
</table>

**NOTE:**
1. Any student completing the General Education requirements for the CSU system or IGETC will also have met the General Education requirements for the Shasta College Associate Degree.
2. Completion of the General Education requirements for the Associate Degree will **not** meet the General Education pattern requirement for the CSU or University of California systems.
3. Total unit requirements for General Education compliance is twenty-one (21) units for an associate degree.

### SECOND DEGREE REQUIREMENTS
- Check with Admissions and Records Office for specific criteria.
- **APPLYING FOR YOUR DEGREE** - You must apply for your A.A./A.S. Degree in the Admissions & Records Office one month before the end of the semester in which you plan to complete it.

### CATALOG RIGHTS
- A currently enrolled student has the right to choose the graduation requirements in effect at either initial enrollment or graduation, provided he/she has not had an interruption of more than two successive semesters. Students planning to transfer to a university should check that institution’s catalog for “rights” accorded community college transfers.

See “Shasta College Associate Degrees” for additional requirements in a major, units, etc. – page 32
Shasta College 2006-2007
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.**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>SPCH 10: Interpersonal Communication</td>
<td>ENGL 1A: Reading &amp; Composition</td>
<td>ENGL 1B: Literature &amp; Composition</td>
</tr>
<tr>
<td>SPCH 54: Small Group Communication</td>
<td>ENGL 1C: Crit. Reasoning/Reading/Writing</td>
<td>PHIL 8: Logic</td>
</tr>
<tr>
<td>SPCH 60: Public Speaking</td>
<td></td>
<td>SPCH 40: Argumentation and Debate</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>ASTR 1: Astronomy</td>
<td>CHEM 1A: General Chemistry</td>
<td>MATH 2: Pre-Calculus Mathematics</td>
</tr>
<tr>
<td>CHEM 1B: General Chemistry</td>
<td>CHEM 2A: Introduction to Chemistry</td>
<td>MATH 3A, 3B: Calculus</td>
</tr>
<tr>
<td>CHEM 2B: Intro to Organic &amp; Bio Chemistry</td>
<td>CHEM 2C: Chemistry for Liberal Arts</td>
<td>MATH 8: Finite Mathematics</td>
</tr>
<tr>
<td>CHEM 10: Chemistry for Liberal Arts</td>
<td>CHEM 12: Film/Television</td>
<td>MATH 10: Plane Trigonometry</td>
</tr>
<tr>
<td>CHEM 11: Chemistry Lab for Liberal Arts</td>
<td>CHEM 13: Environmental Chemistry</td>
<td>MATH 11: Patterns of Mathematical Thought</td>
</tr>
<tr>
<td>CHEM 16: Chemical Problem Solving</td>
<td>CHEM 14: Environmental Science</td>
<td>MATH 13: College Algebra</td>
</tr>
<tr>
<td>ENVR 24: Soils</td>
<td>CHEM 15: Environmental Science</td>
<td>MATH 14: Introduction to Statistics</td>
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<td>MATH 41A, 41B: Concepts Elem. Math</td>
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<tr>
<td></td>
<td></td>
<td>C2: Humanities</td>
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<tr>
<td></td>
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<td>ENGL 19: Survey of Bible as Literature</td>
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<td>ENGL 20: Multicultural American Lit.</td>
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<tr>
<td></td>
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<td>ENGL 25: Linguistics</td>
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<tr>
<td></td>
<td></td>
<td>ENGL 31: Creative Writing</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>C1: Arts</th>
<th>C2: Humanities</th>
<th>C3: Social Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1: Introduction to Art</td>
<td>ENGL 1B: Literature &amp; Composition</td>
<td>PHI 10: Life/Death Moral Issues</td>
</tr>
<tr>
<td>ART 2,3: History of Western Art</td>
<td>ENGL 18: African American Lit</td>
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<tr>
<td><strong>ART 4: Ethnic Art/World Art</strong></td>
<td>ENGL 19: Survey of Bible as Literature</td>
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<tr>
<td>ART 6: History of Modern Art</td>
<td>ENGL 24: Multicultural American Lit.</td>
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<tr>
<td>ENGL 14: Drama as Lit</td>
<td>ENGL 25: Linguistics</td>
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<td>PHIL 7: Ethics and Personal Values</td>
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<td>PHIL 8: Logic</td>
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<td></td>
<td>ENGL 9: Survey of Bible as Literature</td>
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<td>ENGL 10A: Global Literatures after 1500</td>
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<td>ENGL 10B: World Literature to 1500</td>
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<td>ENGL 11A, 11B: Survey of American Lit.</td>
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<td>ENGL 12: Intro to Short Fiction</td>
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<td>ENGL 13A, 13B: Survey of English Lit.</td>
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<td>ENGL 15: Intro. to Lit. By/About Women</td>
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<td>ENGL 16: Poetry</td>
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<td>ENGL 24: Multicultural American Lit.</td>
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<tr>
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<td>PHIL 8: Logic</td>
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</tbody>
</table>
**Shasta College 2006-07 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.

<table>
<thead>
<tr>
<th><strong>D1: Anthropology and Archaeology</strong></th>
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<tbody>
<tr>
<td><strong>ANTH 2</strong>: Cultural Anthropology</td>
</tr>
<tr>
<td><strong>ARCH 3</strong>: Principles of Archaeology</td>
</tr>
<tr>
<td><strong>ANTH 5</strong>: Humanity, Culture &amp; Ecology</td>
</tr>
<tr>
<td><strong>ANTH 14</strong>: Religion, Myth, and Ritual</td>
</tr>
<tr>
<td><strong>ANTH 25</strong>: Culture &amp; History/No. Am. Indian</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>D2: Economics</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>ECON 1A, 1B</strong>: Principles of Economics</td>
</tr>
<tr>
<td><strong>ECON 2</strong>: Economic Issues &amp; Policies</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>D3: Ethnic Studies</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANTH 25</strong>: Culture &amp; Hist/North Am. Indian</td>
</tr>
<tr>
<td><strong>GEOG 7</strong>: California Geography</td>
</tr>
<tr>
<td><strong>HIST 25</strong>: African American History</td>
</tr>
<tr>
<td><strong>HIST 35</strong>: History of Mexican Americans</td>
</tr>
<tr>
<td><strong>PSYC 20</strong>: Cross-cultural Psychology</td>
</tr>
<tr>
<td><strong>SOC 25</strong>: Sociology of Minorities</td>
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</tbody>
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<thead>
<tr>
<th><strong>D4: Gender Studies</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>GEOG 1A</strong>: Envir Physical Geography</td>
</tr>
<tr>
<td><strong>GEOG 1B</strong>: Cultural Geography</td>
</tr>
<tr>
<td><strong>GEOG 8</strong>: World Regional Geography</td>
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<tr>
<td><strong>GEOG 7</strong>: California Geography</td>
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<thead>
<tr>
<th><strong>D5: Geography</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>HIST 1A,1B</strong>: History of Western Civ.</td>
</tr>
<tr>
<td><strong>HIST 2</strong>: World Civ to 1500 C.E.</td>
</tr>
<tr>
<td><strong>HIST 3</strong>: World Civ 1500 to Present</td>
</tr>
<tr>
<td><strong>HIST 17A,17B</strong>: U.S. History &amp; Government</td>
</tr>
<tr>
<td><strong>HIST 40</strong>: History &amp; Govern. California</td>
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<tr>
<td><strong>HIST 55</strong>: History of American Frontier</td>
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<tr>
<td><strong>HIST 57</strong>: Russian Hist./Emph. 20th Century</td>
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<thead>
<tr>
<th><strong>D6: History</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>HIST 17A,17B</strong>: U.S. History &amp; Government</td>
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<tr>
<td><strong>HIST 40</strong>: History &amp; Govern. California</td>
</tr>
<tr>
<td><strong>HIST 55</strong>: History of American Frontier</td>
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<tr>
<td><strong>HIST 57</strong>: Russian Hist./Emph. 20th Century</td>
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<thead>
<tr>
<th><strong>D7: Interdisciplinary Social or Behavioral Science</strong></th>
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<tbody>
<tr>
<td><strong>ECE 1</strong>: Human Development</td>
</tr>
<tr>
<td><strong>ENVR 11</strong>: Environmental Ethics</td>
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<tr>
<td><strong>ECON 17</strong>: Economic History of the US</td>
</tr>
<tr>
<td><strong>JOUR 21</strong>: Intro. to Mass Communications</td>
</tr>
<tr>
<td><strong>PSYC 41</strong>: Cultural/Soc Context of Childhood</td>
</tr>
<tr>
<td><strong>SPCH 20</strong>: Intercultural Communication</td>
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<thead>
<tr>
<th><strong>D8: Political Science, Government, and Legal Institutions</strong></th>
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<tbody>
<tr>
<td><strong>ADJU 10</strong>: Intro to AOJ</td>
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<tr>
<td><strong>POLS 2</strong>: Intro. to Amer. Government</td>
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<tr>
<td><strong>POLS 1</strong>: Intro. to Political Science</td>
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<tr>
<td><strong>POLS 12</strong>: CA State and Local Government</td>
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<td><strong>POLS 25</strong>: Global Politics</td>
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<td><strong>PSYC 46</strong>: Human Memory and Learning</td>
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<thead>
<tr>
<th><strong>D9: Psychology</strong></th>
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<tr>
<td><strong>PSYC 1A</strong>: General Psychology</td>
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<tr>
<td><strong>PSYC 14</strong>: Understanding Human Behavior</td>
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<td><strong>PSYC 15</strong>: Social Psychology</td>
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<td><strong>PSYC 16</strong>: Health Psychology</td>
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<td><strong>PSYC 17</strong>: Abnormal Psychology</td>
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<td><strong>PSYC 20</strong>: Cross-Cultural Psychology</td>
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<tr>
<td><strong>SOC 70</strong>: Social Welfare</td>
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<tr>
<td><strong>SOC 25</strong>: Sociology of Minorities</td>
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</table>

**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 17B or ECON 17 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.

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<thead>
<tr>
<th><strong>E1</strong></th>
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<tbody>
<tr>
<td><strong>BIOL 60</strong>: Biology of Aging</td>
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<tr>
<td><strong>ECE 1</strong>: Human Development</td>
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<tr>
<td><strong>ECE 2</strong>: Child, Family, Community</td>
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<td><strong>FSS 16</strong>: Marriage and Family</td>
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<td><strong>FSS 18</strong>: Adulthood and Aging</td>
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<td><strong>FSS 25</strong>: Nutrition</td>
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<td><strong>FSS 26</strong>: Nutrition Through the Life Span</td>
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<td><strong>FSS 27</strong>: Life Management</td>
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<td><strong>HLTH 1</strong>: Health and Wellness</td>
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<td><strong>HLTH 2</strong>: Nutrition and Fitness</td>
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<td><strong>PHY 5</strong>: Human Sexuality</td>
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<td><strong>PSYC 1A</strong>: General Psychology</td>
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<td><strong>PSYC 14</strong>: Understanding Human Behavior</td>
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<td><strong>SOC 15</strong>: Sociology of Mass Media</td>
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<td><strong>SOC 22</strong>: Sociology of Aging</td>
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<td><strong>SOC 70</strong>: Social Welfare</td>
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CHICO STATE requires two courses to satisfy an Ethnic, Non-Western requirement. Both courses may be part of the 39-unit General Education requirement.

- Courses with one asterisk (*) meet the Ethnic requirement "to foster and expand general understanding of racial and cultural groups in the United States."
  They are ANTH 25, ENGL 18, ENGL 24, HIST 25, HIST 35, SOC 25, and GEOG 7, PSYC 20, PSYC 41, SPCH 20.

- Courses with two asterisks (**) meet the Non-Western requirement "to foster and expand general understanding of non-western societies and cultures."
  They are ANTH 2, HIST 36, HIST 38, ENGL 10A, 10B, ART 4, GEOG 1B, GEOG 8, and 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 2006 through Summer 2007. See [www.assist.org](http://www.assist.org) for new course additions.

5/10/06
2006-2007

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM

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

IGETC must be 100% complete before transfer*, and courses must be completed with a "C" grade or better (CR is acceptable).

AREA 1 - ENGLISH COMMUNICATION

Group A: English Composition (one course)
ENGL 1A: Reading & Composition

Group B: Critical Thinking/English Composition (one course)
ENGL 1C: Critical Reasoning, Reading and Writing

FOR CSU ONLY:
Group C: Oral Communication (one course)
SPCH 10: Interpersonal Communication
SPCH 54: Small Group Communication
SPCH 60: Public Speaking

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

MATH 2: Pre-Calculus
MATH 3A: Calculus+
MATH 3B: Calculus
MATH 8: Finite Math
MATH 9: Survey of Calculus+
MATH 13: College Algebra
MATH 14: Intro to Statistics

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: History of Western Art
ART 4: Ethnic Art of the World

HUMANITIES:
ENGL 10A/B: World Literature
ENGL 11A/B: Survey of American Lit.
ENGL 12: Intro to Short Fiction
ENGL 13A/B: Survey of English Lit.
ENGL 15: Lit. By and About Women
ENGL 16: Poetry
ENGL 17: Intro to Shakespeare
ENGL 18: African American Literature
ENGL 19: Survey of the Bible as Literature
ENGL 24: Multicultural Persp in Amer.

HUM 2: Exploring Humanities
HUM 6: Ethnography
HUM 7: Global Issues
HUM 8: Understanding Society
HUM 9: Understanding the Modern World
HUM 10: Life and Death Moral Issues
HUM 11: History of Jazz and Rock
HUM 12: Musical Appreciation
HUM 13: Popular Culture
HUM 14: Popular Film
HUM 15: Understanding the Modern World

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: Cult/Hist of N. Amer. Indian+
ARCH 3: Principles of Archaeology

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 40: History & Government of CA
HIST 55: History of the American Frontier

PSY 1A: General Psychology
PSY 1B: Intro to Psychology
PSY 15: Social Psychology
PSY 41: Cultural/Soc Context-Childhood
PSY 46: Human Memory & Learning

GEOG 1A: Environ. Physical Geog
GEOG 1B: Cultural Geography
GEOG 7: California Geography
GEOG 8: World Geography

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

+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.


**2006-07 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 Env  
CHEM 10: Chemistry for Liberal Arts+  
CHEM 11: Chemistry Lab/Liberal Arts+  

**BIOLOGICAL SCIENCES:**  
AGRI 20: Plant Science  
ANAT 1: Human Anatomy  
ANTH 1: Physical Anthropology  
BIOL 1: Principles of Biology  
BIOL 10: General Biology+  
BIOL 5: Intro to Human Biology+  

**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:

- FREN 1: Elementary French  
- GERM 1: Elementary German  
- JAPN 1: Elementary Japanese  
- RUSS 1: Elementary Russian  
- SPAN 1: Elementary Spanish

**CSU GRADUATION REQUIREMENT IN U.S. HISTORY AND AMERICAN IDEALS** (not part of IGETC but may be completed prior to transfer) (Two courses, one from each group):

**GROUP 1:**
- ECON 17: Economic History of the United States  
- HIST 17A: U.S. History and Government  
- HIST 17B: U.S. History and Government

**GROUP 2:**
- POLS 2: Introduction to American Government  

**NOTE:** Courses used to meet this requirement may not be double-counted toward IGETC certification (i.e., may not be counted in Area 4, Social and Behavioral Sciences).

+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.

*In rare instances, students may be eligible to complete IGETC after transfer (maximum 2 courses, excluding Areas 1 and 2). The reason must involve a good cause such as illness, unavailable or canceled courses, military service, or unexpected hardships, experienced in the final term before transfer. See a counselor for the appropriate petition. (Effective March 2000)

This is the approved list for courses taken Fall 2006 through Summer 2007. See [www.assist.org](http://www.assist.org) for new course additions. 5/11/06

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**Associate of Arts - University Studies**

The Associate of Arts Degree, University Studies, is a transfer degree program designed for students who plan to transfer to the University of California or a campus of the California State University System. Completion of Option 1 or Option 2 will satisfy all lower division general education requirements for the stated university system. This program applies to most transfer majors, however some majors require an extensive number of lower division courses to prepare for the upper division major, and in those instances it may be more advantageous to focus on completing those courses rather than all lower division general education courses. See a counselor before selecting your program.

**OPTION 1: IGETC** (Interssegmental 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.

2. Complete all IGETC courses with a grade of “C” or better.  
3. Complete a total of 60 transferable units (numbered 1-99). The additional courses should be selected to meet 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](http://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.]

**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 on page 36-37 of the catalog.  
2. Complete HIST 17A or 17B or ECON 17; complete POLS 2. These two courses may be included as part of the 39-unit pattern.  
3. Complete Communication, English, Critical Thinking, and Math requirements (Area A1, A2, A3 and B4) each with a grade of “C” or better.  
4. Complete a total of 60 transferable units (numbered 1-99). The additional courses should be selected 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.]

**Note:**  
1. Any student completing the IGETC or CSU General Education requirements will also have met the general education requirements for the Shasta College associate degree.  
2. Students should request IGETC or CSU certification when they request that their final transcript be sent to the transfer institution.
Degrees and Certificates

Accounting Clerk/Bookkeeper
Completion of the Certificate Program will prepare the student for entry-level position in accounts receivable, accounts payable, payroll, and general ledger.

REQUIREMENTS FOR CERTIFICATE:

**Recommended Course Sequence:**

**First Semester (Fall)**
- ACCT 101** Basic Accounting I 3
- BUAD 10 Introduction to Business 3
- BUAD 106 Business Math 3
- BUAD 166 Business English 3
- OAS 51 Keyboarding I-Beginning Typing 3

**Second Semester (Spring)**
- ACCT 102** Basic Accounting II 3
- ACCT 103 PC Accounting 2
- ACCT 104 Payroll Accounting 2
- BUAD 66 Business Communications 3
- CIS 10 Excel for Windows-I 1
- OAS 64 Computerized Ten-Key 0.5
- OAS 166 Records Management 2

**TOTAL UNITS FOR CERTIFICATE:** 28.5

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

Administration of Justice

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:
A student must maintain a "C" AVERAGE in course work applying to the Administration of Justice degree.

**Recommended Course Sequence:**

**First Semester (Fall)**
- ADJU 10 Introduction to Admin. of Justice 3
- ADJU 17 Principles and Procedures of the Justice System 3
- ADJU 23 Career Planning for Admin. of Justice 3

**Second Semester (Spring)**
- ADJU 15 Concepts of Criminal Law 3
- ADJU 16 Legal Aspects of Evidence 3

**Third Semester (Fall)**
- ADJU 20 Principles of Investigation 3
- ADJU 26 Courtroom Testimony/Report Writing 3

**Fourth Semester (Spring)**
- ADJU 18 Community Relations 3
- 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 Institutional and Field Services 3
- ADJU 41 Fundamentals of Crime and Delinquency 3
- ADJU 42 Interviewing and Counseling 3
- CIS 1 Computer Literacy Workshop 3

In addition to the required major courses, six (6) units must be selected from below:
- ADJU 11 Traffic Control and Investigation 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 Institutional and Field Services 3
- ADJU 41 Fundamentals of Crime and Delinquency 3
- ADJU 42 Interviewing and Counseling 3
- CIS 1 Computer Literacy Workshop 3

<table>
<thead>
<tr>
<th>Associate in Science Degree Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>30</td>
</tr>
<tr>
<td>General Education</td>
<td><strong>21</strong></td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
</tr>
</tbody>
</table>

**The general education requirement includes English Composition. The Administration of Justice student may choose the following alternative by enrolling in ENGL 190 (4 units) or BUAD 166 (3 units) or all three of the following: ENGL 191, ENGL 193 and ENGL 194 (4 units)**
Agriculture

The Agriculture Program provides training for ranching and farming careers and agriculture-related jobs in education, sales, services, and distribution of agriculture-related products. Students should contact their counselor or agriculture faculty advisor to choose electives for the particular career they are planning to enter.

Particular attention should be paid to course prerequisites and to whether a class is taught during the fall or spring semester, or both.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

Recent input from industry and past graduates indicates that advanced levels of mathematics and English are essential for adequate career preparation. Students who are unable to qualify for the advanced levels of mathematics and English are encouraged to begin their mathematics and English sequence courses as soon as possible.

**Recommended Course Sequence:**

**First Semester (Fall)**
- AGRI 51 Agriculture Records and Analysis 3
- ENVR 52 Computers in Environmental Resources 3
- AGRI 54 Resource Economics 3
- ENVR 1 Career Planning for Environ. Resources 2
- ENVR 9 Agriculture/Natural Resources Leadership 1
- SPCH 54* Small Group Communication 3

**Second Semester (Spring)**
- AGRI 19* Principles of Animal Science 3
- AGRI 20 Plant Science 4
- ENGL 1A* Reading and Composition 4
- ENVR 44 Mechanical Tech. for Environ. Resources 3
- MATH 101* Basic Algebra 3

**Third Semester (Fall)**
- AGRI 56 Agriculture Practices OR 1-4
- ENVR 94 Worksite Learning OR 1-4
- AGRI 159 Farm Management Experience 7
- CHEM 2A Introduction to Chemistry OR 5
- CHEM 6 Intro. Chemistry Applied to the Environ. 4
- ENVR 24 Soils 3
- General Education (Social Science) 3
- General Education (Multicultural/Living Skills) 3

**Fourth Semester (Spring)**
- AGRI 6 Career Placement - Agriculture 1
- AGRI 50 Agriculture Resource Management 3
- General Education (Humanities) 3
- Elective Courses to complete A.S. Degree 0-1
- Required Major Electives 6

**Associate in Science Degree Requirements**

<table>
<thead>
<tr>
<th></th>
<th># of units</th>
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</thead>
<tbody>
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<td>General Education</td>
<td>9</td>
</tr>
<tr>
<td>Electives</td>
<td>0-1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>60-65</td>
</tr>
</tbody>
</table>

*Can be used to fulfill General Education requirements.

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. Sixty (60) units are required for the AS Degree. All graduation requirements are met.

**Art**

This curriculum qualifies the student for the AS degree with a concentration in the Visual Arts. Transfer Art students should check course requirements with counselors or the transfer college.

**REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE:**

Students must complete the "CORE" courses and select nine (9) units from the "RESTRICTED ELECTIVE" courses listed below for their major. In addition, students must fulfill the 33-39 unit general education pattern for CSU or IGETC.

**CORE COURSES:**

<table>
<thead>
<tr>
<th># of units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2</td>
</tr>
<tr>
<td>ART 3</td>
</tr>
<tr>
<td>ART 12</td>
</tr>
<tr>
<td>ART 13</td>
</tr>
<tr>
<td>ART 21A/B</td>
</tr>
</tbody>
</table>
Art A.A. Degree – continued:

**RESTRICTED ELECTIVE COURSES:**
Choose nine (9) units in 2-D or 3-D areas (i.e., Ceramics, Drawing, Painting, Glass, Photography, Printmaking, Sculpture)

**Recommended Course Sequence:**

**First Semester (Fall)**
- ART 12  Beginning Form, Design and Color 3
- ART 21A  Freehand Drawing 3
- 2-D or 3-D  Art Elective 3

**Second Semester (Spring)**
- ART 13  Intermediate Form, Design and Color 3
- ART 21B  Freehand Drawing 3
- 2-D or 3-D  Art Elective 3

**Third Semester (Fall)**
- ART 2  History of Western Art Through Renaissance 3

**Fourth Semester (Spring)**
- ART 3  History of Western Art Since Renaissance 3
- 2-D or 3-D  Art Elective 3

---

**Associate in Arts Degree Requirements**

<table>
<thead>
<tr>
<th>Major</th>
<th>General Education</th>
<th>Electives</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>33-39</td>
<td>0</td>
<td>60</td>
</tr>
</tbody>
</table>

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**Automotive Engine Performance/Smog Technician**

The goals of this certificate are for students to gain entry-level skills in the automotive engine performance/smog technician field. The objectives are to prepare them for ASE certification and meet the requirements for taking the smog technician license exams.

**REQUIREMENTS FOR CERTIFICATE:**

**Recommended Course Sequence:**

**Fall Semester**
- AUTO 1  Vehicle Electrical Systems 3
- AUTO 20  Engine Performance 4
- AUTO 172  Basic Area Clean Air Car Course 3

**Spring Semester**
- AUTO 10  Automotive Electronics 3
- AUTO 21  Advanced Engine Performance 3
- AUTO 150  Internal Combustion Engine Theory 3

**Suggested Electives:**
- AUTO 94  Worksite Learning 1-4
  - Any Automotive course not listed above ___

**TOTAL UNITS FOR FAST TRACK** 19

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**Automotive Machine Certificate**

**REQUIREMENTS FOR CERTIFICATE:**

**Recommended Course Sequence:**

**Fall Semester**
- AUTO 150  Automotive Internal Combustion Engines Theory 3
- AUTO 152  Automotive Engines Laboratory 3

**Spring Semester**
- AUTO 180  Automotive Machinist I 4

**Fall Semester**
- AUTO 181  Automotive Machinist II 4
- AUTO 94  Worksite Learning for Automotive Technology 2

**TOTAL UNITS FOR CERTIFICATE** 16
Automotive Technology
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.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

<table>
<thead>
<tr>
<th>Recommended Course Sequence:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester (Fall)</strong></td>
</tr>
<tr>
<td>AUTO 170</td>
</tr>
<tr>
<td>AUTO 1</td>
</tr>
<tr>
<td>AUTO 150</td>
</tr>
<tr>
<td>AUTO 152</td>
</tr>
<tr>
<td>INDE 1</td>
</tr>
<tr>
<td>MATH 100*</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Second Semester (Spring)</strong></td>
</tr>
<tr>
<td>AUTO 10</td>
</tr>
<tr>
<td>AUTO 163</td>
</tr>
<tr>
<td>AUTO 147</td>
</tr>
<tr>
<td>ENGL 190*</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Third Semester (Fall)</strong></td>
</tr>
<tr>
<td>AUTO 20</td>
</tr>
<tr>
<td>AUTO 130</td>
</tr>
<tr>
<td>AUTO 161</td>
</tr>
<tr>
<td>WELD 70</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester (Spring)</strong></td>
</tr>
<tr>
<td>AUTO 21</td>
</tr>
<tr>
<td>AUTO 131</td>
</tr>
<tr>
<td>AUTO 162</td>
</tr>
<tr>
<td>AUTO 94</td>
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<tr>
<td><strong>Suggested Electives:</strong></td>
</tr>
<tr>
<td>AUTO 94</td>
</tr>
<tr>
<td>AUTO 172</td>
</tr>
<tr>
<td>AUTO 180</td>
</tr>
<tr>
<td>DIES 48</td>
</tr>
<tr>
<td>BUAD 10*</td>
</tr>
<tr>
<td>OAS 51</td>
</tr>
</tbody>
</table>

**Associate in Science Degree Requirements**

<table>
<thead>
<tr>
<th>Major</th>
<th>51</th>
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</thead>
<tbody>
<tr>
<td>General Education</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>66</td>
</tr>
</tbody>
</table>

*Can be used to fulfill General Education requirements.

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

REQUIREMENTS FOR CERTIFICATE:
The goals of this program are the same as for the Associate of Science Degree in Automotive Technology except that there are only 6 General Education units required as opposed to the 21 General Education units required in the degree program. The objective is to allow the student to gain entry level skills specific to the automotive industry.

**Recommended Course Sequence:**

<table>
<thead>
<tr>
<th><strong>First Semester (Fall)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 170</td>
</tr>
<tr>
<td>AUTO 1</td>
</tr>
<tr>
<td>AUTO 150</td>
</tr>
<tr>
<td>AUTO 152</td>
</tr>
<tr>
<td>INDE 1</td>
</tr>
<tr>
<td>MATH 100*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Second Semester (Spring)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 10</td>
</tr>
<tr>
<td>AUTO 163</td>
</tr>
<tr>
<td>AUTO 147</td>
</tr>
<tr>
<td>ENGL 190*</td>
</tr>
</tbody>
</table>
Automotive Technology A.S. Degree – continued:

### Third Semester (Fall)
- AUTO 20  Engine Performance  4
- AUTO 130  Automotive Steering & Suspension  3
- AUTO 161  Manual Drive Trains & Axles  3
- WELD 70  Beginning Welding  3

### Fourth Semester (Spring)
- AUTO 21  Advanced Engine Performance  3
- AUTO 131  Automotive Wheel Alignment  2
- AUTO 162  Automotive Transmissions and Transaxles  4
- AUTO 94  Worksite Learning  1

**TOTAL UNITS FOR CERTIFICATE:**  51

*Can be used to fulfill General Education requirements.

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

### Business Administration

For the following Associate in Science degrees in Business Administration, students must complete the core courses plus those listed for each degree.

- Business Administration – Accounting
- Business Administration – General Business
- Business Administration – Management
- Business Administration – Real Estate

#### Required Core Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting I <strong>OR</strong></td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2</td>
<td>Introduction to Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>BUAD 6</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 15</td>
<td>Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 45</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 66</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Keyboarding I-Beginning Typing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education</td>
<td></td>
</tr>
</tbody>
</table>

In addition, students must satisfy all of the regular Associate in Science degree requirements. For a complete description of those requirements, please refer to the “Associate in Science” section of this catalog.

### Business Administration - Accounting Concentration

#### REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

#### Recommended Course Sequence:

**First Semester (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101√</td>
<td>Basic Accounting-I <strong>OR</strong></td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2</td>
<td>Introduction to Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>BUAD 10√</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1√</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Keyboarding I-Beginning Typing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education</td>
<td></td>
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</tbody>
</table>

**Second Semester (Spring)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 102</td>
<td>Basic Accounting-II <strong>OR</strong></td>
<td>3</td>
</tr>
<tr>
<td>ACCT 4</td>
<td>Introduction to Managerial Accounting</td>
<td></td>
</tr>
<tr>
<td>ACCT 103</td>
<td>PC Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BUAD 45√</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 66√</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106√</td>
<td>Business Math</td>
<td>3</td>
</tr>
<tr>
<td>OAS 64</td>
<td>Computerized Ten-Key</td>
<td>0.5</td>
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**Third Semester (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACCT 194</td>
<td>Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 6√</td>
<td>Business Law</td>
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<tr>
<td>CIS*</td>
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<tr>
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</table>
Fourth Semester (Spring)
ACCT 104 Payroll Accounting 2
BUAD 15 Business and Society 3
   General Education 3
   Electives 8.5
\checkmark Required Business CORE Course

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Major</th>
<th>39.5</th>
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<tr>
<td>Additional General Education</td>
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<tr>
<td>Electives</td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>60</td>
</tr>
</tbody>
</table>

Business Administration – Entrepreneurship Certificate

REQUIREMENTS FOR CERTIFICATE:

Recommended Course Sequence:
BUAD 40 Entrepreneurship and Small Business Operations 3
BUAD 41 Leadership and Supervision 3
BUAD 42 Financing a Small Business 3
MKTG 70 Sales 3
BUAD 72 e-Commerce Marketing 1
BUAD 80 Principles of Customer Service 3
BUAD 86 Decision Making and Problem Solving 0.5
BUAD 90 Foundation Essentials: Values and Ethics 0.5

**TOTAL UNITS FOR CERTIFICATE:** 17

Business Administration - General Business Concentration

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

Recommended Course Sequence:

First Semester (Fall)
ACCT 101 OR Basic Accounting I 3
ACCT 2 Introduction to Financial Accounting
BUAD 10 Introduction to Business 3
CIS 1 Computer Literacy Workshop 3
   General Education 6

Second Semester (Spring)
BUAD 45 Human Relations on the Job 3
BUAD 66 Business Communications 3
BUAD 106 Business Mathematics 3
REAL 30 Real Estate Principles 3
   General Education 3

Third Semester (Fall)
BUAD 6 Business Law 3
BUAD 91 Principles of Management OR 3
CIS 4 Business Data Communications

Required Major Electives: Any BUAD, MKTG, LEGL, REAL, CIS, ACCT or OAS 6
   General Education 3

Fourth Semester (Spring)
BUAD 15 Business and Society 3
Required Major Electives: Any BUAD, MKTG, LEGL, REAL, CIS, ACCT or OAS 3

One of the following courses (1 unit or 3 units):
ACCT 102 Basic Accounting II 3
ACCT 2 Introduction to Financial Accounting 3
BUAD 8 Business Law 3
BUAD 41 Supervision and Leadership 3
BUAD 71 Intro. to e-Commerce 1
BUAD 72 e-Commerce Marketing 1
MKTG 70 Sales 3
MKTG 74 Principles of Marketing 3
OAS 51 Keyboarding I-Beginning Typing 3

Any Electives (Suggested Electives: BUAD 73, MKTG 76) 6-8
\checkmark Required Business CORE Course

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Major</th>
<th>40-42</th>
</tr>
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<tr>
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</table>
### Business Administration - Management Concentration

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

**Recommended Course Sequence:**

#### First Semester (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting I OR ACCT 2 Intro to Financial Acctg.</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Math</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td></td>
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<td>3</td>
</tr>
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</table>

#### Second Semester (Spring)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUAD 66</td>
<td>Business Communications</td>
<td>3</td>
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<td>BUAD 45</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
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<td></td>
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#### Third Semester (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 6</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 41</td>
<td>Supervision and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 91</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>CIS/OAS*</td>
<td>Computer Applications</td>
<td>1-3</td>
</tr>
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</table>

#### Fourth Semester (Spring)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUAD 8</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 15</td>
<td>Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 71</td>
<td>Intro to e-Commerce OR - Computer Applications</td>
<td>1-3</td>
</tr>
<tr>
<td>BUAD 72</td>
<td>e-Commerce Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 70</td>
<td>Sales</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 74</td>
<td>Principles of Marketing</td>
<td>3</td>
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</table>

*A total of 3 units is required

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<thead>
<tr>
<th>Associate in Science Degree Requirements</th>
<th>Units</th>
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<tr>
<td>Major</td>
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<td>Electives</td>
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<td><strong>TOTAL</strong></td>
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</table>

### Business Administration - Real Estate Concentration

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

**Recommended Course Sequence:**

#### First Semester (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 45</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 66</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>REAL 30</td>
<td>Real Estate Principles</td>
<td>3</td>
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</table>

#### Second Semester (Spring)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting-I OR ACCT 2 Intro to Financial Acctg.</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>REAL 34</td>
<td>Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education</td>
<td>6</td>
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</tbody>
</table>

** Only one of these classes will apply toward unit requirements for the real estate broker’s license.

#### Third Semester (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 6</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>REAL 32</td>
<td>Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>REAL 33</td>
<td>Legal Aspects of Real Estate</td>
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</tr>
<tr>
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#### Fourth Semester (Spring)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
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<tr>
<td>BUAD 15</td>
<td>Business and Society</td>
<td>3</td>
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<tr>
<td>MKTG 70</td>
<td>Sales</td>
<td>3</td>
</tr>
<tr>
<td>REAL 31</td>
<td>Real Estate Practice</td>
<td>3</td>
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** Required Business CORE Course

<table>
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<tr>
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<th>Units</th>
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<tr>
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<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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</table>
Civil Engineering Technology

This curriculum is designed to prepare the individual for employment as a Civil Engineering Technician with the potential for more rapid advancement to positions of greater responsibility in surveying and civil construction.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

Recommended Course Sequence:
Students must complete the "CORE" courses listed below in addition to 15 units of general education for the Associate in Science degree requirements. For a complete description of those requirements, please refer to the "Associate in Science" section of this catalog.

First Semester (Fall)
ENGR 2 Career Planning for Engineering and Engineering Tech. 1
ENGR 22 Engineering Graphics 2
ENGR 29 Computer-Aided Drafting (CAD) 2
ENGR 64 Engineering Materials Testing 3
MATH 102* Intermediate Algebra 4
General Education 3

*This course may be waived if student can demonstrate appropriate score on the Math Placement Exam.

Second Semester (Spring)
ENGR 24 Descriptive Geometry 2
ENGR 33 Solid Modeling Computer-Aided Drafting 2
MATH 10 Plane Trigonometry 3
General Education 6

Third Semester (Fall)
ENGR 1A Measurements and Plane Surveying 3
ENGR 27 Map and Computer-Aided Drafting 3
ENGR 36 Statics/Strength of Materials for Engr. Tech. 3
General Education 3

Fourth Semester (Spring)
ENGR 1B Plane Surveying 3
ENGR 25 Structural Drafting 3
PHYS 101 Technical Physics 3
Any Electives 3
General Education 3

Required Major Electives: Choose at least three (3) units from the following:
ENGR 20 Residential Design 2
ENGR 21 Architectural Drawing 3
ENGR 30 Intermediate Computer-Aided Drafting 2
ENGR 32 Adv. Civil Design Applications for CAD 3
ENGR 94 Engineering Worksite Learning 1-4

Associate in Science Degree Requirements
<table>
<thead>
<tr>
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<td>TOTAL</td>
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</tbody>
</table>

*General education requirement includes English Composition. The Civil Engineering Technology student may choose one of the following to satisfy this requirement: ENGL 190 or BUAD 166 or a combination of ENGL 191, ENGL 192, or ENGL 194 for a total of 4 units (3 courses)

REQUIREMENTS FOR CERTIFICATE:
This Certificate is designed to provide employable knowledge and skills, with the level of general education reduced from what is required for an AS degree. Students must complete the "CORE" courses and at least three (3) units from the "ELECTIVE" courses listed below.

Recommended Course Sequence:

First Semester (Fall)
ENGR 2 Career Planning for Engineering and Engineering Tech. 1
ENGR 22 Engineering Graphics 2
ENGR 29 Computer-Aided Drafting (CAD) 2
ENGR 64 Engineering Material Testing 3
MATH 102* Intermediate Algebra 4

*This course may be waived if student can demonstrate appropriate score on the Math Placement Test.

Second Semester (Spring)
ENGR 24 Descriptive Geometry 2
ENGR 33 Solid Modeling Computer-Aided Drafting 2
MATH 10 Plane Trigonometry 3
Civil Engineering Technology Certificate – continued:

**Third Semester (Fall)**
- ENGR 1A Measurements and Plane Surveying 3
- ENGR 27 Map and Computer-Aided Drafting 3
- ENGR 31 Architectural Applications for CAD 2
- ENGR 36 Statics/Strength of Materials for Engineering Technicians 3

**Fourth Semester (Spring)**
- ENGR 1B Plane Surveying 3
- ENGR 25 Structural Drafting 3

**Elective Courses:** Choose at least three (3) units from the following:
- ENGR 20 Residential Design 2
- ENGR 21 Architectural Drawing 3
- ENGR 30 Intermediate Computer-Aided Drafting 2
- ENGR 32 Adv. Civil Design Applications for CAD 3
- ENGR 94 Engineering Worksite Learning 1-4

**TOTAL UNITS FOR CERTIFICATE**
39

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**Communication Arts**

**REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE:**
Students must complete the “CORE” courses listed below for their major. In addition, students must fulfill the 33-39-unit general education pattern for CSU or IGETC

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th># of units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 4</td>
<td>Humanities through the Film OR THTR 12 Acting 1</td>
<td>3</td>
</tr>
<tr>
<td>HUM 70</td>
<td>Exploring Contemporary Television</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 10</td>
<td>Interpersonal Communication</td>
<td>3</td>
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<tr>
<td>SPCH 20</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 30</td>
<td>Oral Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 40</td>
<td>Argumentation and Debate</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 54</td>
<td>Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 60</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

**Recommended Course Sequence:**

**First Semester (Fall)**
- SPCH 10 Interpersonal Communication 3
- SPCH 60 Public Speaking 3

**Second Semester (Spring)**
- SPCH 30 Oral Interpretation 3
- SPCH 54 Small Group Communication 3

**Third Semester (Fall)**
- HUM 4 Humanities through the Film OR THTR 12 Acting I 3
- SPCH 40 Argumentation and Debate 3

**Fourth Semester (Spring)**
- HUM 70 Exploring Contemporary Television 3
- SPCH 20 Intercultural Communication 3

**Associate in Arts Degree Requirements**

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
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<td>33-39</td>
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<td>Electives</td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

---

**Computer Aided Drafting (CAD) Technology**

This curriculum is designed to prepare the individual for employment as a Mechanical Drafter with potential for more rapid advancement into mechanical design and other areas of specialization. If engineering transfer is an option after receiving an A.S. degree, consider alternate engineering transfer courses. See a counselor for details.

**Recommended Course Sequence:**

**First Semester (Fall)**
- CIS 1 Computer Literacy Workshop 3
- ENGR 2 Career Planning for Engineering and Engineering Tech. 1
- ENGR 22 Engineering Graphics 2
- ENGR 29 Computer-Aided Drafting 2
- MATH 102 Intermediate Algebra 4
- General Education 3
Computer Aided Drafting A.S. Degree – continued:

**Second Semester (Spring)**
- ENGR 24 Descriptive Geometry 2
- ENGR 26 Industrial Drafting 4
- ENGR 30 Intermediate Computer-Aided Drafting 2
- MATH 10 Plane Trigonometry 3
- General Education 3

**Third Semester (Fall)**
- ENGR 27 Map and Computer-Aided Drafting 3
- ENGR 31 Architectural Applications of CAD 2
- ENGR 36 Statics/Strength of Materials for Engr. Tech. 3
- ENGR 64 Engineering Material Testing 3
- General Education 3

**Fourth Semester (Spring)**
- ENGR 25 Structural Drafting 3
- ENGR 33 Solid Modeling Computer-Aided Drafting 2
- PHYS 101 Technical Physics 3
- General Education 6

**Required Major Elective Courses**: Choose at least five (5) units from the following:
- CIS 10 Excel for Windows-I 1
- ENGR 1A Measurements and Plane Surveying 3
- ENGR 1B Plane Surveying 3
- ENGR 21 Architectural Drawing 3
- ENGR 32 Adv. Civil Design Applications for CAD 3
- ENGR 94 Engineering Worksite Learning 1-4

(Architectural CAD Drafting preparation should also include ENGR 21, CONS 178, CONS 52, and ENGR 1A or NR 64)

### Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Major</th>
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<tbody>
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<td><strong>62</strong></td>
</tr>
</tbody>
</table>

**REQUIREMENTS FOR CERTIFICATE:**
This certificate is designed to provide employable knowledge and skills, with the level of general education reduced from what is required for an Associate in Science degree. Students must complete the "CORE" courses and at least four (4) units from the "ELECTIVE" courses listed below.

**Recommended Course Sequence:**

**First Semester (Fall)**
- ENGR 2 Career Planning for Engineering and Engineering Tech. 1
- ENGR 22 Engineering Graphics 2
- ENGR 29 Computer-Aided Drafting 2
- MATH 102 Intermediate Algebra 4

**Second Semester (Spring)**
- ENGR 24 Descriptive Geometry 2
- ENGR 26 Industrial Drafting 4
- ENGR 30 Intermediate Computer-Aided Drafting 2
- MATH 10 Plane Trigonometry 3

**Third Semester (Fall)**
- ENGR 31 Architectural Applications of CAD 2
- ENGR 36 Statics/Strength of Materials for Engr. Tech. 3

**Fourth Semester (Spring)**
- ENGR 25 Structural Drafting 3
- ENGR 33 Solid Modeling Computer-Aided Drafting 2

**Elective Courses**: Choose at least four (4) units from the following:
- CIS 1 Computer Literacy Workshop 3
- ENGR 1A Measurements and Plane Surveying 3
- ENGR 1B Plane Surveying 3
- ENGR 20 Residential Design 2
- ENGR 21 Architectural Drawing 3
- ENGR 27 Map and Computer-Aided Drafting 3
- ENGR 32 Adv. Civil Design Applications for CAD 3
- ENGR 94 Engineering Worksite Learning 1-4

(Architectural CAD Drafting preparation should also include ENGR 20, ENGR 21, ENGR 31, CONS 178, CONS 52, and ENGR 1A or NR 64)
**Computer and Information Systems-**

**Business Information Systems Concentration**

**Requirements for Associate in Science Degree:**

Students must complete the “CORE” courses listed below in addition to 21 units of general education for the Associate in Science degree requirements. For a complete description of those requirements, please refer to the "Associate in Science" section of this catalog.

**Recommended Course Sequence:**

**First Semester (Fall)**

<table>
<thead>
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<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting 1 or</td>
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<tr>
<td>ACCT 2</td>
<td>Introduction to Financial Accounting</td>
<td>3</td>
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<tr>
<td>BUAD 10</td>
<td>Introduction to Business (fulfills GE requirement)</td>
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<tr>
<td>CIS 2</td>
<td>Introduction to Computer Science</td>
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<tr>
<td>CIS 70</td>
<td>Windows 1</td>
<td>1</td>
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<tr>
<td>OAS</td>
<td>Word Processing</td>
<td>1</td>
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<td></td>
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**Second Semester (Spring)**

<table>
<thead>
<tr>
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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 6</td>
<td>Business Law</td>
<td>3</td>
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<td>BUAD 71</td>
<td>Introduction to e-Commerce</td>
<td>1</td>
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<td>BUAD 106*</td>
<td>Business Mathematics</td>
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<tr>
<td>CIS</td>
<td>Spreadsheet</td>
<td>1</td>
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<tr>
<td>CIS 60</td>
<td>Visual Basic Programming or</td>
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<tr>
<td>CIS 61</td>
<td>C++ Language Programming or</td>
<td></td>
</tr>
<tr>
<td>CIS 62</td>
<td>Java Programming or</td>
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<tr>
<td>CIS 63</td>
<td>Assembler Language Programming</td>
<td>3-4</td>
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<tr>
<td>CIS 61</td>
<td>Web Design (Front Page I)</td>
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*(Or other math course that meets general education requirement)*

**Third Semester (Fall)**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BUAD 15</td>
<td>Business and Society</td>
<td>3</td>
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<tr>
<td>CIS</td>
<td>Database</td>
<td>1</td>
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<tr>
<td>CIS 4</td>
<td>Business Data Communications</td>
<td>3</td>
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<tr>
<td>CIS 31</td>
<td>CISCO Networking CCNA 1 –Networking Fundamentals</td>
<td>3</td>
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<td>Required Major Elective (see below)</td>
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**Fourth Semester (Spring)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUAD 45</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 66</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 3</td>
<td>Systems Analysis</td>
<td>3</td>
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<td></td>
<td>Required Major Electives (see below)</td>
<td>4</td>
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<tr>
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<td>General Education</td>
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</table>

**Required Major Electives: Choose seven (7) units from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUAD 72</td>
<td>e-Commerce Marketing</td>
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</tr>
<tr>
<td>BUAD 73</td>
<td>Web Design/e-Commerce</td>
<td>1</td>
</tr>
<tr>
<td>CIS 5</td>
<td>Help Desk – Level 1</td>
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<td>CIS 11</td>
<td>Excel for Windows II</td>
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<td>CIS 21</td>
<td>Access for Windows II</td>
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<tr>
<td>CIS 22</td>
<td>Access for Windows III</td>
<td>1</td>
</tr>
<tr>
<td>CIS 32</td>
<td>CISCO Networking CCNA 2-Router Technology</td>
<td>3</td>
</tr>
<tr>
<td>CIS 50</td>
<td>Install, Configure, and Administer MS Windows XP Pro</td>
<td>1</td>
</tr>
<tr>
<td>CIS</td>
<td>Second Programming Language</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(CIS 60, CIS 61, CIS 62, or CIS 63)</td>
<td>3-4</td>
</tr>
<tr>
<td>CIS 71</td>
<td>Windows II</td>
<td>1</td>
</tr>
<tr>
<td>CIS 72</td>
<td>Fundamentals of Unix</td>
<td>3</td>
</tr>
<tr>
<td>CIS 84</td>
<td>HTML-Beginning</td>
<td>1</td>
</tr>
<tr>
<td>CIS 90</td>
<td>A+ Certification Preparation/Cisco IT Essentials I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 92</td>
<td>Introduction to Computer Security – Security +</td>
<td>3</td>
</tr>
<tr>
<td>CIS 94</td>
<td>Computer Information Systems Worksite Learning</td>
<td>1</td>
</tr>
</tbody>
</table>

**Associate in Science Degree Requirements**

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>50-51</td>
</tr>
<tr>
<td>Additional General Education</td>
<td>12</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>62-63</strong></td>
</tr>
</tbody>
</table>
Computer and Information Systems
Computer Networking Concentration-CCNA Option

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:
Students must complete the "CORE" courses listed below in addition to 21 units of general education for the Associate in Science degree requirements. For a complete description of those requirements, please refer to the "Associate in Science" section of this catalog.

Recommended Course Sequence:

First Semester (Fall)

CIS 2* Introduction to Computer Science 4
CIS 31 Cisco Networking CCNA 1 Networking Fundamentals 3
CIS 32 Cisco Networking CCNA 2 Routing Technology 3
CIS 90 A+ Certification Preparation/Cisco IT Essentials I 4
*Fulfills GE requirement if math requirement already met

Second Semester (Spring)

BUAD 45 Human Relations on the Job 3
CIS 33 Cisco Networking CCNA 3-LAN Switching and Design 3
CIS 34 Cisco Networking CCNA 4-WAN Technology and Design 3
ELEC 138 Fundamentals of Electronics 4
General Education 3

Third Semester (Fall)

CIS 50 Install, Configure and Administer MS Windows XP Pro 1
CIS 51 Manage/Maintain MS Windows Server 2003 Environment 1
CIS 52 Manage/Maintain Windows 2003 Network Infrastructure 1
CIS 81 Web Design (Front Page I) 1
Required Major Electives (see below) 3
General Education 9

Fourth Semester (Spring)

CIS 53 Plan and Maintain Windows 2003 Network Infrastructure 1
CIS 54 Plan, Implement, Maintain Windows 2003 AD Infrastructure 1
CIS 55 Designing Windows Server 2003 AD & Network Infrastructure 1
Required Major Electives (see below) 4
General Education 6

Summer

CIS 56 Designing Security for Windows Server 2003 Network 1

Required Major Electives: Choose seven (7) units from the following:

BUAD 10 Introduction to Business (fulfills GE Requirement) 3
CIS 5 Help Desk – Level 1 1
CIS 39 Cisco Networking – Fundamentals of Network Security 3
CIS 60 Visual Basic OR CIS 61 C++ OR CIS 62 Java OR 3-4
CIS 63 Assembler Language Programming 3-4
CIS 72 Fundamentals of Unix 3
CIS 82 Web Design (Front Page II) 3
CIS 94 HTML - Beginning 1
CIS 92 Introduction to Computer Security – Security + 3
CIS 94 Computer Information Systems Worksite Learning 1

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Major</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional GE</td>
<td>16</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
</tr>
</tbody>
</table>

REQUIREMENTS FOR CERTIFICATE

Students who have already completed the CCNA Certification or who have successfully completed the Cisco Network Academy CCNA courses may substitute the CCNP course work for the CCNA course work in this Certificate program. This would consist of taking the CIS 35 through CIS 38 series rather than the CIS 31 through CIS 34 series of classes. The courses are listed as follows:

First Semester (Fall)

CIS 2* Introduction to Computer Science 4
CIS 31 Cisco Networking CCNA 1-Networking Fundamentals 3
CIS 32 Cisco Networking CCNA 2-Routing Technology 3
CIS 90 A+ Certification Preparation/Cisco IT Essentials I 4

Second Semester (Spring)

CIS 33 Cisco Networking CCNA 3-LAN Switching and Design 3
CIS 34 Cisco Networking CCNA 4-WAN Technology and Design 3
CIS 81 Web Design (Front Page I) 1
ELEC 138 Fundamentals of Electronics 4

Third Semester (Fall)

CIS 50 Install, Configure and Administer MS Windows XP Pro 1
CIS 51 Manage and Maintain a MS Windows Server 2003 Environment 1
CIS 52 Manage and Maintain Windows 2003 Network Infrastructure 1
### Computer and Information Systems/CCNA Certificate – continued:

**Fourth Semester (Spring)**
- CIS 53: Plan and Maintain Windows 2003 Network Infrastructure 1
- CIS 54: Plan, Implement & Maintain Windows 2003 AD Network Infrastr. 1
- CIS 55: Designing a Windows Server 2003 AD and Network Infrastr. 1

**Summer**
- CIS 56: Designing Security for a MS Windows 2003 Network Infrastructure 1

**TOTAL UNITS FOR CERTIFICATE**

### Computer and Information Systems - Computer Networking Concentration-CCNP Option

Prior to enrollment in the first semester of the CCNP Option (A.S. Degree or Certificate), students must have completed CIS 34 with a grade of “C” or higher, current CCNA certification, or the equivalent as determined by the multiple measures process.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**
Students must complete the “CORE” courses listed below in addition to 21 units of general education for the Associate in Science degree requirements. For a complete description of those requirements, please refer to the “Associate in Science” section of this catalog.

**Recommended Course Sequence:**

- **First Semester (Fall)**
  - CIS 2*: Introduction to Computer Science 4
  - CIS 35: Cisco Networking CCNP 1-Advanced Routing Configuration 3
  - CIS 90: A+ Certification Preparation/Cisco IT Essentials I 4
  - ELEC 138: Fundamentals of Electronics 4
- **Second Semester (Spring)**
  - BUAD 45: Human Relations on the Job 3
  - CIS 36: Cisco Networking CCNP 2-Remote Access Networks 3
  - CIS 81: Web Design (Front Page I) 1
  - General Education 6
- **Third Semester (Fall)**
  - CIS 37: Cisco Networking CCNP 3-Multi-Layer Switching 3
  - CIS 50: Install, Configure, and Administer MS Windows XP Pro 1
  - CIS 51: Manage/Maintain MW Windows Server 2003 Environment 1
  - CIS 52: Manage/Maintain Windows 2003 Network Infrastructure 1
  - Required Major Electives (see below) 4
  - General Education 6
- **Fourth Semester (Spring)**
  - CIS 38: Cisco Networking CCNP 4-InterNetworking Troubleshooting 3
  - CIS 53: Plan and Maintain Windows 2003 Network Infrastructure 1
  - CIS 54: Plan, Implement, Maintain Windows 2003 AD Infrastructure 1
  - CIS 55: Designing Windows Server 2003 AD and Network Infrastructure 1
  - Required Major Electives (see below) 3
  - General Education 6
- **Summer**
  - CIS 56: Designing Security for Windows Server 2003 Network 1

**Required Major Elective (Choose at least 7 units from the following):**
- BUAD 10: Introduction to Business (fulfills G.E. requirement) 3
- CIS 5: Help Desk – Level 1 1
- CIS 60: Visual Basic OR CIS 61 C++ OR CIS 62 Java OR
- CIS 63: Assembler Language Programming 3-4
- CIS 72: Fundamentals of Unix 3
- CIS 82: Web Design (Front Page II) 1
- CIS 84: HTML – Beginning 1
- CIS 94: Computer Information Systems Worksite Learning 1

**Associate in Science Degree Requirements**

<table>
<thead>
<tr>
<th>Major</th>
<th>42</th>
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</thead>
<tbody>
<tr>
<td>Additional General Education</td>
<td>18</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

**REQUIREMENTS FOR CERTIFICATE**

- **First Semester (Fall)**
  - CIS 2*: Introduction to Computer Science 4
  - CIS 35: Cisco Networking CCNP 1-Advanced Routing Configuration 3
  - CIS 50: Install, Configure, and Administer MS Windows XP Pro 1
  - CIS 51: Manage/Maintain MW Windows Server 2003 Environment 1
  - CIS 52: Manage/Maintain Windows 2003 Network Infrastructure 1
  - *Fulfills GE requirement if math requirement is already met
Computer and Information Systems/CCNP Option – continued:

Second Semester (Spring)
- CIS 36 Cisco Networking CCNP 2 – Remote-Access Networks 3
- CIS 53 Plan and Maintain Windows 2003 Network Infrastructure 1
- CIS 54 Plan, Implement, Maintain Windows 2003 AD Infrastructure 1
- CIS 55 Designing Windows Server 2003 AD and Network Infrastructure 1
- CIS 81 Web Design (Front Page I) 1
- CIS 90 A+ Certification Preparation/Cisco IT Essentials I 4

Summer
- CIS 56 Designing Security for Windows Server 2003 Network 1

Third Semester (Fall)
- CIS 37 Cisco Networking CCNP 3-Multi-Layering Switching 3
- ELEC 138 Fundamentals of Electronics 4

Fourth Semester (Spring)
- CIS 38 Cisco Networking CCNP 4-InterNetworking Troubleshooting 3

TOTAL UNITS FOR CERTIFICATE 32

Computer Maintenance
The Computer Maintenance Certificate Program provides the exposure and training necessary to maintain and troubleshoot common micro-
computer systems to the board level. This program provides hands-on training in basic electronics, DOS installation and operation, PC repair and computer management.

Requirements for Certificate:

Core Classes
Students must complete the core courses listed below
- CIS 1 Computer Literacy Workshop 3
- ELEC 138 Fundamentals of Electronics 4

TOTAL CORE UNITS 7

Network Emphasis
- CIS 31 Cisco Networking CCNA 1-Networking Fundamentals 3
- CIS 32 Cisco Networking CCNA 2-Routing Technology 3

TOTAL NETWORK EMPHASIS UNITS 17

Computer Emphasis
- CIS 90 A+ Certification Preparation/Cisco IT Essentials I 4

TOTAL COMPUTER EMPHASIS UNITS 15

Construction Technology
This 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.

Requirements for Associate in Science Degree:

Recommended Course Sequence:
First Semester (Fall)
- CONS 53 Materials of Construction 3
- CONS 71 Woodworking 3
- CONS 151 Carpentry Practices I 6
- INDE 1 Career Planning for Industrial Technology 1
- MATH 100* Technical Applications of Mathematics 3

Second Semester (Spring)
- CONS 72 Cabinetmaking 3
- CONS 152 Carpentry Practices II 6
- CONS 155 Residential Electrical 3
- ENGL 190* Reading and Writing II **(see below for alternative) 4

Third Semester (Fall)
- CONS 154 Residential Plumbing 3
- CONS 178 Building Codes and Standards 3
- ENGR 119 Blueprint and Spec. Reading (Architecture) 2
- WELD 70 General Education 3
Construction Technology A.S. Degree – continued:

**Fourth Semester (Spring)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 52</td>
<td>Residential Estimating</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education</td>
<td>12</td>
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</table>

**Suggested Electives:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 10*</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>CONS 73</td>
<td>Furniture &amp; Cabinet Finishing</td>
<td>3</td>
</tr>
<tr>
<td>CONS 74</td>
<td>Trim &amp; Detail Finishing</td>
<td>3</td>
</tr>
<tr>
<td>CONS 94</td>
<td>Worksite Learning for Construction Tech.</td>
<td>1-4</td>
</tr>
<tr>
<td>CONS 150</td>
<td>Introduction to Residential Construction</td>
<td>3</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Keyboarding I-Beginning Typing</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate in Science Degree Requirements</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Major</td>
<td>46</td>
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<tr>
<td>General Education</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>61</td>
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</table>

*Can be used to fulfill the General Education requirement.

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

**Requirements for Construction Technology Certificate:**

**Recommended Course Sequence:**

**First Semester (Fall)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 53</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CONS 71</td>
<td>Woodworking</td>
<td>3</td>
</tr>
<tr>
<td>CONS 151</td>
<td>Carpentry Practices I</td>
<td>6</td>
</tr>
<tr>
<td>INDE 1</td>
<td>Career Planning for Industrial Technology</td>
<td>1</td>
</tr>
<tr>
<td>MATH 100</td>
<td>Technical Applications of Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Semester (Spring)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 72</td>
<td>Cabinetmaking</td>
<td>3</td>
</tr>
<tr>
<td>CONS 152</td>
<td>Carpentry Practices II</td>
<td>6</td>
</tr>
<tr>
<td>CONS 155</td>
<td>Residential Electrical</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 190*</td>
<td>Reading and Writing II **(see below for alternative)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Third Semester (Fall)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 154</td>
<td>Residential Plumbing</td>
<td>3</td>
</tr>
<tr>
<td>CONS 178</td>
<td>Building Codes and Standards</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 119</td>
<td>Blueprint and Specification. Reading (Architectural)</td>
<td>2</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Beginning Welding</td>
<td>3</td>
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</table>

**Fourth Semester (Spring)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 52</td>
<td>Residential Estimating</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE**

| Total Units | 46 |

*Can be used to fulfill General Education requirements.

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

**Customer Service Academy Certificate**

The Center for Business, Mathematics, and Technology is offering a Customer Service Academy Certificate to be awarded at the completion of the core courses listed below:

**Requirements for Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUAD 81</td>
<td>Stress Management in the Workplace</td>
<td>0.5</td>
</tr>
<tr>
<td>BUAD 82</td>
<td>Managing Organizational Change</td>
<td>0.5</td>
</tr>
<tr>
<td>BUAD 83</td>
<td>Conflict Resolution</td>
<td>0.5</td>
</tr>
<tr>
<td>BUAD 84</td>
<td>Attitude in the Workplace</td>
<td>0.5</td>
</tr>
<tr>
<td>BUAD 85</td>
<td>Customer Service in the Workplace</td>
<td>0.5</td>
</tr>
<tr>
<td>BUAD 86</td>
<td>Decision Making and Problem Solving</td>
<td>0.5</td>
</tr>
<tr>
<td>BUAD 87</td>
<td>Team Building</td>
<td>0.5</td>
</tr>
<tr>
<td>BUAD 88</td>
<td>Communicating with People</td>
<td>0.5</td>
</tr>
<tr>
<td>BUAD 89</td>
<td>Time Management</td>
<td>0.5</td>
</tr>
<tr>
<td>BUAD 90</td>
<td>Foundation Essentials: Values and Ethics</td>
<td>0.5</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE**

| Total Units | 5.0 |
Dental Hygiene

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.

REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM:
1. Students must have a high school diploma or its equivalent
2. Completion of the Humanities requirement and Mathematics competency requirement is necessary for graduation and strongly recommended prior to entering the program.

PREREQUISITE COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1</td>
<td>Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>PHY 1</td>
<td>Physiology (with Lab)</td>
<td>5</td>
</tr>
<tr>
<td>MICR 1</td>
<td>Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 1A</td>
<td>Reading and Composition</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2A</td>
<td>Introduction to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 2B</td>
<td>Introduction to Organic and Biochemistry</td>
<td>5</td>
</tr>
<tr>
<td>SOC 1</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1A</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 60</td>
<td>Public Speaking or SPCH 10 Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>FSS 25</td>
<td>Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL PREREQUISITE UNITS: 41

Final selection of qualified applicants is competitive. Please contact the Center for Human Development for information regarding the selection criteria used to evaluate qualified applicants.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>DNTL 10</td>
<td>Oral Biology</td>
<td>3</td>
</tr>
<tr>
<td>DNTL 11</td>
<td>Oral Radiology</td>
<td>3</td>
</tr>
<tr>
<td>DNTL 12</td>
<td>Head and Neck Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>DNTL 13</td>
<td>Dental Health Education/Seminar</td>
<td>2</td>
</tr>
<tr>
<td>DNTL 14</td>
<td>Introduction to Clinic</td>
<td>4</td>
</tr>
<tr>
<td>DNTL 20</td>
<td>Local Anesthesia and Nitrous Oxide</td>
<td>2</td>
</tr>
<tr>
<td>DNTL 21</td>
<td>General and Oral Pathology</td>
<td>4</td>
</tr>
<tr>
<td>DNTL 23</td>
<td>Patient Management and Geriatrics</td>
<td>2</td>
</tr>
<tr>
<td>DNTL 24</td>
<td>Clinical Practice I</td>
<td>4</td>
</tr>
<tr>
<td>DNTL 25</td>
<td>Clinic I Seminar</td>
<td>2</td>
</tr>
<tr>
<td>DNTL 26</td>
<td>Nutrition in Dentistry</td>
<td>1</td>
</tr>
<tr>
<td>DNTL 30</td>
<td>Periodontics I</td>
<td>3</td>
</tr>
<tr>
<td>DNTL 31</td>
<td>Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>DNTL 32</td>
<td>Dental Materials</td>
<td>2</td>
</tr>
<tr>
<td>DNTL 33</td>
<td>Advanced Clinical Topics</td>
<td>2</td>
</tr>
<tr>
<td>DNTL 34</td>
<td>Clinical Practice II</td>
<td>4</td>
</tr>
<tr>
<td>DNTL 35</td>
<td>Clinical II Seminar</td>
<td>1</td>
</tr>
<tr>
<td>DNTL 40</td>
<td>Periodontics II</td>
<td>1</td>
</tr>
<tr>
<td>DNTL 41</td>
<td>Practice and Financial Management</td>
<td>1</td>
</tr>
<tr>
<td>DNTL 42</td>
<td>Clinic III Seminar</td>
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</tr>
<tr>
<td>DNTL 43</td>
<td>Clinical Practice III</td>
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</tr>
<tr>
<td>DNTL 44</td>
<td>Community Oral Health</td>
<td>3</td>
</tr>
<tr>
<td>DNTL 45</td>
<td>Ethics and Jurisprudence</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR MAJOR: 56

Diesel Technology

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.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

Recommended Course Sequence: (for students starting Fall semester)

**First Semester (Fall)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIES 48</td>
<td>Hydraulics</td>
<td>3.5</td>
</tr>
<tr>
<td>DIES 160</td>
<td>Diesel Engine Electronic Control</td>
<td>4</td>
</tr>
<tr>
<td>DIES 162</td>
<td>Heavy Duty Power Train</td>
<td>4</td>
</tr>
<tr>
<td>DIES 164</td>
<td>Diesel Performance Analysis</td>
<td>4</td>
</tr>
<tr>
<td>INDE 1</td>
<td>Career Planning for Industrial Tech.</td>
<td>1</td>
</tr>
</tbody>
</table>
Diesel Technology A.S. Degree – continued:

**Second Semester (Spring)**
- DIES 49 Advanced Hydraulics 3
- DIES 94 Worksite Learning For Diesel Technology 1-4
- DIES 161 Diesel Technology Field Training 2
- DIES 166 Diesel Engines 6
- DIES 170 Heavy Duty Braking Systems 4

**Third Semester (Fall)**
- ENGL 190* Reading and Writing II **(see below for alternatives) 4
- MATH 100* Technical Applications of Mathematics 3
- WELD 70 Beginning Welding 3

**Fourth Semester (Spring)**
- WELD Any Advanced Welding Class 3
- General Education 12

### Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th></th>
<th>Major</th>
<th>General Education</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Associate in</strong></td>
<td>45.5-48.5</td>
<td>15</td>
<td>60.5-63.5</td>
</tr>
<tr>
<td>Science Degree</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Can be used to fulfill General Education requirements.

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

### Recommended Course Sequence: (for students starting Spring semester)

**First Semester (Spring)**
- DIES 48 Hydraulics 3.5
- DIES 170 Heavy Duty Braking Systems 4
- ENGL 190* Reading and Writing II **(see below for alternatives) 4
- INDE 1 Career Planning for Industrial Technology 1
- MATH 100* Technical Applications of Mathematics 3
- WELD 70 Beginning Welding

**Second Semester (Fall)**
- DIES 49 Advanced Hydraulics 3
- DIES 160 Diesel Engine Electronic Control 4
- DIES 162 Heavy Duty Power Train 4
- DIES 164 Diesel Performance Analysis 4
- General Education 3

**Third Semester (Spring)**
- DIES 94 Worksite Learning For Diesel Technology 1-4
- DIES 161 Diesel Technology Field Training 2
- DIES 166 Diesel Engines 6
- WELD Any Advanced Welding Class 3

**Fourth Semester (Fall)**
- General Education 9

### Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th></th>
<th>Major</th>
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<tr>
<td><strong>Associate in</strong></td>
<td>45.5-48.5</td>
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<td>60.5-63.5</td>
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<tr>
<td>Science Degree</td>
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</tbody>
</table>

*Can be used to fulfill General Education requirements.

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

### REQUIREMENTS FOR DIESEL TECHNOLOGY CERTIFICATE:

**Recommended Course Sequence:**

**First Semester (Fall)**
- DIES 48 Hydraulics (F/S) 3.5
- DIES 162 Heavy Duty Power Train (F) 4
- DIES 164 Diesel Performance Analysis (F) 4
- INDE 1 Career Planning for Industrial Tech. (F/S) 1

**Second Semester (Spring)**
- 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 (S) 2
- DIES 166* Diesel Engines (S) 6
- DIES 170 Heavy Duty Braking Systems (S) 4
Diesel Technology Certificate – continued:

<table>
<thead>
<tr>
<th>Third Semester (Fall)</th>
<th>Units</th>
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<tr>
<td>ENGL 190 Reading and Writing II ** (see below for alternatives)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 100 Technical Applications of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>WELD 70 Beginning Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD Any Advanced Welding Class</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE 45.5-48.5**

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

Note: This sequence of courses is designed for students who enroll in the fall semester. For students who enroll during the spring semester, please check prerequisites, as it may take a little longer to complete the certificate requirements.

* = Check Prerequisites (F) = Fall Class Only (S) = Spring Class Only

**Dietary Service Supervisor Certificate**

The Center for Business, Mathematics, and Technology is offering a Dietary Service Supervisor Certificate to be awarded at the completion of the core courses listed below:

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULA 50</td>
<td>Sanitation and Safety 2</td>
</tr>
<tr>
<td>DSS 10</td>
<td>Food Production Management 4</td>
</tr>
<tr>
<td>DSS 63</td>
<td>Personnel Management, Supervision Techniques/Training 3</td>
</tr>
<tr>
<td>DSS 94</td>
<td>Dietary Service Supervisor Worksite Learning 3</td>
</tr>
<tr>
<td>FSS 25</td>
<td>Nutrition 3</td>
</tr>
<tr>
<td>FSS 27</td>
<td>Nutrition and Disease 2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE 17**

**Early Childhood Education**

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.

Follow the Suggested Sequence of Courses listed below along with the Shasta College catalog for general education and graduation requirements. Particular attention should be given to suggested course advisories, prerequisites, and courses that are offered only during the Fall (F) or Spring (S) terms. An asterisk (*) denotes a course has a suggested prerequisite course requirement or advisory.

There are 44 required Early Childhood Education units for the Associate Degree. Students need to complete core-required courses (39 units) and an additional 5 units selected from offerings listed after the core courses. The additional General Education units (16 units) need to be taken in the following five categories – Natural Science, Humanities, English, Math and Speech. All courses applied to the A.S. ECE Degree must be completed with a “C” grade or better.

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

**REQUIRED MAJOR CORE COURSES (Recommended Course Sequence)**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>ECE 1</td>
<td>Human Development (F/S) 3</td>
</tr>
<tr>
<td>First Semester</td>
<td>ECE 4</td>
<td>Introduction to Early Childhood Education (F/S) 1</td>
</tr>
<tr>
<td>First Semester</td>
<td>ECE 20</td>
<td>E.C. Curriculum: Introduction to Curriculum (F/S) 2</td>
</tr>
<tr>
<td>First Semester</td>
<td>ECE 52</td>
<td>Guidance in Adult-Child Relations (S) 3</td>
</tr>
<tr>
<td>Second Semester</td>
<td>ECE 2</td>
<td>Child, Family, Community (F/S) 3</td>
</tr>
<tr>
<td>Second Semester</td>
<td>ECE 7*</td>
<td>Early Childhood Observation &amp; Assessment (F/S) 3</td>
</tr>
<tr>
<td>Second Semester</td>
<td>ECE 11*</td>
<td>Meeting Special Needs of Children (S) 2</td>
</tr>
<tr>
<td>Second Semester</td>
<td>ECE 30*</td>
<td>E.C. Curriculum: Physical Development (S) 3</td>
</tr>
<tr>
<td>Third Semester</td>
<td>ECE 3*</td>
<td>Early Childhood Program Administration (F) 3</td>
</tr>
<tr>
<td>Third Semester</td>
<td>ECE 40*</td>
<td>E.C. Curriculum: Affective Development (F) 3</td>
</tr>
<tr>
<td>Third Semester</td>
<td>ECE 50*</td>
<td>E.C. Curriculum: Cognitive Development (S) 3</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td>ECE 8*</td>
<td>Teaching Practices for Young Children (F) 5</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td>ECE 15</td>
<td>Health &amp; Safety in Children’s Programs (S) 3</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td>ECE 16*</td>
<td>Fundamentals of EC Mentoring &amp; Supervision (S) 2</td>
</tr>
</tbody>
</table>
Early Childhood Education A.S. Degree – continued:

**Additional Early Childhood Education Program Units**

Students must select an additional five units from the ECE program courses listed below:

- ECE 6 Exploring Family Childcare 3
- ECE 10 Early Childhood Learning 3
- ECE 12 Infant-Toddler Learning 3
- ECE 13 Envir. for Infant/Toddler, Preschool or School age Child Care 2
- ECE 14 School Age and Adolescent Development 3
- ECE 22 EC Curriculum: Infant/Toddler Care 1
- ECE 24 EC Curriculum: School Age Care 1
- ECE 51 Early Childhood Staffing and Management 3
- ECE 152 The Young Child: Movement, Rhythm, and Singing 1
- ECE 155 The Young Child: Introduction to the Montessori Method 1

ECE graduates are qualified to work with children ages 0-5. However, it is recommended that students meet the additional 5-unit requirement by selecting and completing one of the following Specializations (Infant/Toddler or School-Age). A Specialization is required for the Master Teacher Level of the Child Development Permit, issued by the California Commission on Teaching Credentialing. Associate and Teacher Levels do not require a Specialization.

**INFANT/TODDLER TEACHING SPECIALIZATION**

- ECE 13 Envir. for Infant/Toddler, Preschool or School age Child Care 2
- ECE 12 Infant-Toddler Learning 3
- ECE 22 E.C. Curriculum: Infant/Toddler Care 1

**SCHOOL-AGE TEACHING SPECIALIZATION**

- ECE 13 Envir. for Infant/Toddler, Preschool or School-Age Child Care 2
- ECE 14 School-Age and Adolescent Development 3
- ECE 24 E.C. Curriculum: School-Age Care 1

**Suggested Electives:**

- FSS 16 Marriage and Family 3
- FSS 25 Nutrition 3
- FSS 60 Life Management 3
- MUS 1 Music Fundamentals 3
- PSYC 41 Cultural/Social Context of Childhood 3
- SPCH 54 Small Group Communication 3

**Associate in Science Degree Requirements**

<table>
<thead>
<tr>
<th>Required Major Core Courses</th>
<th>39</th>
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</thead>
<tbody>
<tr>
<td>Selected Additional ECE Program Units</td>
<td>5</td>
</tr>
<tr>
<td>*(Natural Science, Humanities, English, Math, and Speech)</td>
<td>16</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

**REQUIREMENTS FOR CERTIFICATE:**

The Early Childhood Education Certificate offers students initial training to work with young children. After completion of the 16 unit certificate requirements, the student qualifies for employment as an entry-level teacher in private child care settings licensed through the Department of Social Services. The Early Childhood Education Certificate course work also meets the training requirements for the Child Development Associate Teacher Permit issued by the California Commission on Teacher Credentialing.

The courses listed below may also be applied to an Early Childhood Education AS Degree (See college counselor and Recommended Course Sequence for Associate of Science Degree). Particular attention should be given to suggested course prerequisites and to courses that are offered only during the Fall or Spring terms. Probable time of course offering is indicated by a F (Fall), S (Spring). An asterisk (*) means that there is a prerequisite (condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in that course).

All courses to be applied to the Early Childhood Education Certificate must be completed with a "C" grade or better.

**Recommended Course Sequence:**

**First Semester (Fall)**

- ECE 1 Human Development (F/S) 3
- ECE 4 Intro. to Early Childhood Education (F/S) 1
- ECE 20 E.C. Curriculum: Intro. to Curriculum (F/S) 2

**Second Semester (Spring)**

- ECE 2 Child, Family, Community (F/S) 3
- ECE 52 Guidance in Adult-Child Relations (S) 3

**Select four (4) units from the following courses**

- ECE 7* Early Childhood Observation and Assessment (F/S) 1
- ECE 11* Meeting Special Needs of Children (S) 1
- ECE 13 Envir. for Infant/Toddler, Preschool or School-Age Child Care (F) 1
- ECE 30* E.C. Curriculum: Physical Development (S) 1
- ECE 50* E.C. Curriculum: Cognitive Development (F) 1
- ECE 40* E.C. Curriculum: Affective Development (S) 1

**TOTAL UNITS**

16
Early Childhood Education - Family Childcare
The Early Childhood Education Family Childcare Certificate offers students initial training for employment as a family childcare provider. After completion of the 16-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).

Follow the suggested sequence of courses listed below along with the Shasta College catalog. Particular attention should be given to course advisories, prerequisites, and courses that are offered only during the Fall (F) or Spring (S) terms. An asterisk (*) denotes a course that has a prerequisite course requirement.

All courses to be applied to the Early Childhood Education Family Childcare Certificate must be completed with a “C” grade or better.

REQUIREMENTS FOR CERTIFICATE:

Recommended Course Sequence:
First Semester (Fall)
- ECE 1 Human Development (F/S) 3
- ECE 6 Exploring Family Childcare (F/S) 3
- ECE 20 E.C. Curriculum: Intro. to Curriculum (F/S) 2

Second Semester (Spring)
- ECE 2 Child, Family, Community (F/S) 3
- ECE 13 Environments for Infant/Toddler, PS, S-A 2

Select three (3) units from the following courses:
- ECE 11* Meeting Special Needs of Children – 2 units (S)
- ECE 12 Infant/Toddler Learning – 3 units (F)
- ECE 14 School-Age Learning – 3 units (S)
- ECE 22 EC Curriculum: Infant/Toddler Care – 1 unit (F)
- ECE 24 EC Curriculum: School Age Care – 1 unit (S)
- ECE 30* EC Curriculum: Physical Development – 3 units (S)
- ECE 40* EC Curriculum: Cognitive Development – 3 units (F)
- ECE 50* EC Curriculum: Affective Development – 3 units (S)
- ECE 52 Guidance in Adult-Child Relations – 3 units (S)

TOTAL UNITS FOR CERTIFICATE: 16

Environmental Horticulture Transfer Degree
Also see Horticulture for other Degree/Certificates
The Environmental Horticulture Transfer Degree is a 2+2 program providing students the opportunity to complete all lower division coursework at Shasta College for a B.S. degree in Environmental Horticulture at CSU Chico. This is a special major at Chico State and is only available to transfer students. Students interested in more details about this degree should contact the Horticulture Dept at 225-4827.

While completing transfer requirements, students will also receive training adequate for job placement in areas of landscape management, wholesale and retail nursery and related horticultural fields.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

REQUIRED MAJOR CORE COURSES

First Semester - Fall
- ENGL 1A* Reading and Composition 4
- HORT 22 Nursery Practices and Plant Propagation 2
- HORT 27, 28 & 29 Plant Identification and Taxonomy 3
- HORT 33 Environmental Horticulture OR
- AGRI 20 Plant Science 3
- AREA E* Any Area E Course 3
- AREA C# Any Ethnic Studies or Non-Western Course 3
Second Semester – Spring
- HIST 17A or 17B** U.S. History and Government 3
- HORT 23 Nursery Practices and Management 2
- HORT 35 Landscape Design 3
- HORT 37 Nursery and Florist Management OR
- AGRI 54 Resource Economics 3
- SPCH 54 or A1* Small Group Communication 3
- AREA C1 Any C1 Course 3
Third Semester – Fall
- ENV 44 Mechanical Tech for Environmental Resources 3
- HORT 31 Landscape Irrigation 3
- CHEM 2A Introduction to Chemistry 5
- POLS 2#** Introduction to American Government 3
- AREA A3* Any A3 Course 3
Environmental Horticulture Transfer Degree – continued:

**Fourth Semester – Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 24</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>HORT 7</td>
<td>Horticulture Career Survey and Placement</td>
<td>1</td>
</tr>
<tr>
<td>HORT 38</td>
<td>Landscape and Turf Management</td>
<td>3</td>
</tr>
<tr>
<td>MATH 14*</td>
<td>Introduction to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 1 or C2*</td>
<td>Elementary Spanish</td>
<td>3-5</td>
</tr>
<tr>
<td>AREA D#</td>
<td>Any Non-Western or Ethnic Studies course</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR DEGREE** 68-70

**Note:** All courses must be completed with a grade of C or higher

* These courses fulfill general education requirements for transfer
** These courses fulfill the U.S. History, Constitution, and American Ideals requirement
# Students must have one Ethnic Studies and one Non-Western course

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**Equine Science**

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 A.S. degree. All graduation requirements are met.

**Recommended Course Sequence:**

**First Semester (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AGRI 12</td>
<td>Horsemanship</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 52</td>
<td>Computers in Environmental Resources</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 56</td>
<td>Agriculture Practices OR</td>
<td>2-4</td>
</tr>
<tr>
<td>ENVR 94</td>
<td>Worksite Learning</td>
<td>2-4</td>
</tr>
<tr>
<td>ENV 1</td>
<td>Career Planning for Environ. Resources</td>
<td>2</td>
</tr>
<tr>
<td>SPCH 54*</td>
<td>Small Group Communication, General Education (Social Science)</td>
<td>3</td>
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</table>

**Second Semester (Spring)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AGRI 13</td>
<td>Horse Husbandry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A*</td>
<td>Reading and Composition</td>
<td>4</td>
</tr>
<tr>
<td>AGRI 20*</td>
<td>Plant Science</td>
<td>4</td>
</tr>
<tr>
<td>ENVR 44</td>
<td>Mechanical Technology for Environmental Resources</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101*</td>
<td>Basic Algebra</td>
<td>3</td>
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**Third Semester (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>AGRI 16</td>
<td>Veterinary Practices</td>
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<tr>
<td>AGRI 21</td>
<td>Horse Management</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 51</td>
<td>Agriculture Records and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 54</td>
<td>Resource Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education (Multicultural/Living Skills)</td>
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**Fourth Semester (Spring)**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AGRI 6</td>
<td>Career Placement - Agriculture</td>
<td>1</td>
</tr>
<tr>
<td>AGRI 11</td>
<td>Feeds and Feeding</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 50</td>
<td>Agriculture Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 24</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education (Humanities)</td>
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**Associate in Science Degree Requirements**

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
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<tbody>
<tr>
<td>Major</td>
<td>51-53</td>
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<tr>
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<td>9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>60-62</td>
</tr>
</tbody>
</table>

**Suggested additional courses which will broaden the AS Degree (recommended consultation with Agriculture faculty):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 14</td>
<td>Western Riding and Training</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 110</td>
<td>Horse Training</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 112</td>
<td>Horseshoeing</td>
<td>2</td>
</tr>
<tr>
<td>AGRI 114</td>
<td>English Riding and Training</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 9</td>
<td>Agriculture and Natural Resources Leadership</td>
<td>1</td>
</tr>
</tbody>
</table>

*Can be used to fulfill General Education requirements.*
Equine Science – continued:

**REQUIREMENTS FOR CERTIFICATE:**

**CORE COURSES FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 6</td>
<td>Career Placement - Agriculture</td>
<td>1</td>
</tr>
<tr>
<td>AGRI 11</td>
<td>Feeds and Feeding</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 12</td>
<td>Horsemanship</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 13</td>
<td>Horse Husbandry</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 16</td>
<td>Veterinary Practices</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 56</td>
<td>Agriculture Practices OR</td>
<td>1-4</td>
</tr>
<tr>
<td>ENVR 94</td>
<td>Worksite Learning</td>
<td>1-4</td>
</tr>
<tr>
<td>ENVR 1</td>
<td>Career Planning for Environ. Resources</td>
<td>2</td>
</tr>
<tr>
<td>MATH 100</td>
<td>Technical Applications of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 54</td>
<td>Small Group Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required Elective Courses:** Choose nine (9) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 14</td>
<td>Western Riding and Training</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 110</td>
<td>Horse Training</td>
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<td>AGRI 112</td>
<td>Horseshoeing</td>
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<tr>
<td>AGRI 114</td>
<td>English Riding and Training</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 9</td>
<td>Agriculture and Natural Resources Leadership</td>
<td>1</td>
</tr>
<tr>
<td>ENVR 44</td>
<td>Mechanical Tech. for Environmental Resources</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 31

---

**Equipment Operations and Maintenance**

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.

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 6</td>
<td>Career Placement – Agriculture OR</td>
<td>1</td>
</tr>
<tr>
<td>INDE 1</td>
<td>Career Planning for Industrial Technology</td>
<td></td>
</tr>
<tr>
<td>CONS 46</td>
<td>Equipment Operations and Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>CONS 48</td>
<td>Surveying for Equipment Operators</td>
<td>2</td>
</tr>
<tr>
<td>CONS 55</td>
<td>Equipment Operations Skills Development OR</td>
<td>1-2</td>
</tr>
<tr>
<td>ENVR 94</td>
<td>Environmental Resources Worksite Learning</td>
<td></td>
</tr>
<tr>
<td>ENVR 24</td>
<td>Soils OR</td>
<td>3</td>
</tr>
<tr>
<td>DIES 48</td>
<td>Hydraulics</td>
<td>4.5</td>
</tr>
<tr>
<td>ENVR 44</td>
<td>Mechanical Tech. for Environmental Resources OR</td>
<td>3</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Beginning Welding</td>
<td></td>
</tr>
<tr>
<td>ENVR 47</td>
<td>Project Construction for Equipment Operations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 100*</td>
<td>Technical Applications of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>NR 66</td>
<td>Watershed Restoration Practicum</td>
<td>2</td>
</tr>
</tbody>
</table>

*or Math Placement Level 3 or higher

**TOTAL UNITS FOR CERTIFICATE** 21-23.5

Suggested Courses: AGRI 149, AUTO 1, DIES 166, DIES 170, ENGR 118, SPCH 54, WELD 170, English, Computers
Family Studies
This program is designed to provide students with foundational skills and knowledge about human action and interaction within the primary social, cultural and economic unit in 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 AS degree will have the opportunity to enter the career ladder in a number of entry level or paraprofessional positions or have the foundation to transfer in a related major at a four-year college or university.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:
There are 37 units required for the Associate Science Degree in Family Studies. Students need to complete the required core courses (31 units) and an additional 6 units selected from the options listed after the core courses. An additional 12 units of General Education, plus electives to total 60 units will complete the A.S. Degree requirements. Students who wish to transfer should consult the CSU and IGETC General Education requirements as well as specific lower division requirements for their desired major at a particular four-year institution, in order to make the best use of their time.

Recommended Course Sequence:

First Semester
- FSS 16 Marriage & Family 3
- ECE 1 Human Development 3

Second Semester
- FSS 10 Introduction to Human Services 3
- FSS 60 Life Management 3
- SPCH 10 Interpersonal Communication 3

Third Semester
- FSS 25 Nutrition 3
- ECE 2 Child, Family & Community 3
- PSYC 41 Cultural/Social Context of Childhood 3

Fourth Semester
- FSS 46 Personal Finance 3
- FSS 18 Adulthood and Aging 3
- FSS 94 Worksite Learning 1-4

In addition, students must complete a total of 6 units from the options listed below:

Choose 3 units from the following:
- PSYC 1A General Psychology 3
- PSYC 14 Understanding Human Behavior 3

Choose 3 units from the following:
- SOC 1 Introduction to Sociology 3
- SOC 2 Social Problems 3
- HUSV 132 Introduction to Mental Disorders 3

<table>
<thead>
<tr>
<th>Associate in Science Degree Requirements</th>
<th>Major</th>
<th>31-34</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected Additional Units</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>General Education</td>
<td>12</td>
<td></td>
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<tr>
<td>Electives</td>
<td>8-11</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

Fire Technology
The Fire Technology curriculum is planned to serve both as an in-service program and as a pre-employment two-year program for community college students aspiring to enter the field of firefighting. Each student must complete thirty-five and a half (35½) units. 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.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:
Students must complete the "CORE" courses listed below for their major. In addition, students must satisfy all the regular Assoc. in Science degree requirements. For a complete description of those requirements, please refer to the "Associate in Science" section of this catalog.

Recommended Course Sequence:
Courses listed may be offered either spring or fall semesters, or at the discretion of the Department. This course sequence is based on students who are not taking the Firefighter I Academy. Students who want to complete the Firefighter I Academy should plan on committing one full semester to that class (25 total units).

First Semester (Fall)
- FIRS 70 Introduction to Fire Technology 3
- FIRS 71 Fire Behavior and Combustion 3
- FIRS 74 Fire Protection Equipment and Systems 3
- FIRS 79 Fire Fighter Safety and Survival 3
- FIRS 85 Fire Command IA 2

Second Semester (Spring)
- FIRS 72 Fire Prevention Technology 3
- FIRS 86 Building Construction for the Fire Service 3
- FIRS 101 Career Placement 1
- FIRS 189 Fire Investigation I 2
- FAID 175 EMT I Basic 3.5
- General Education 3
Fire Technology A.S. Degree – continued:

**Third Semester (Fall)**
- BIOL 5 Introduction to Human Biology 3
- FSS 25 Nutrition 3
- SPCH SPCH 10, 20, 54 or 60 General Education 6

**Fourth Semester (Spring)**
- General Education 3
- Elective 12.5

**Suggested Electives**
- FIRS 191 Fire Investigation 1B 2
- FIRS 104 Fire Fighter I Academy 21
- FIRS 87 Fire Command 1B 2
- FIRS 94 Fire Fighter Trainee Worksite Learning 4
- FIRS 180 Fire Management I 2
- FIRS 108 Fire Fighter II Academy 5

**Associate in Science Degree Requirements**

<table>
<thead>
<tr>
<th>Major</th>
<th>35.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>12</td>
</tr>
<tr>
<td>Electives</td>
<td>12.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60.0</td>
</tr>
</tbody>
</table>

**California State Firefighter I and II Certification**

Students wishing to apply for California State Fire Marshal’s Office Firefighter I or II certification must meet the following criteria:
- Complete the required coursework as outlined by the State Fire Marshal’s Office.
- Work a minimum of either six months as a paid full-time firefighter or 12 months as a volunteer.
- A recommendation and signature on appropriate form from the Fire Chief of the department that a student works for or volunteers at is a mandatory requirement.

Note: No college in California certifies individuals as Firefighter I or Firefighter II. All certifications are approved by the California State Fire Marshal’s Office.

**Fire Technology – Wildland Firefighter I Academy**

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.

**REQUIREMENTS FOR CERTIFICATE:**
- FIRS 73 Wildland Firefighter I Academy 4

**Geographic Information Systems**

The Geographic Information Systems (GIS) Certificate at Shasta College provides students the skills needed to apply GIS technology to a variety of applications. Students will develop foundation skills in computer usage and map fundamentals. From this foundation GIS fundamentals will be taught, both in conceptual and practical terms. The application of GIS to various problems will be emphasized. All students will work on real world projects. Related technologies, such as global positioning systems (GPS) and image analysis will be introduced.

**REQUIREMENTS FOR CERTIFICATE:**
- GIS 10 Introduction to GIS 3
- GIS 11 Advanced GIS 3
- GIS 12 Databases for Geographic Information Systems 2
- GIS 13 Mobile GIS/GPS 1
- GIS 94 GIS Worksite Learning 2
- GEOG 10 Map Reading and Interpretation 3
- CIS 60 Basic Programming Language 3

**TOTAL UNITS FOR CERTIFICATE** 17

**Additional Supporting Courses:**
- GIS 90 Working with GIS 1
- GIS 97 Special Topics in GIS 1
- ENGR 29 Computer-Aided Drafting 3
- CIS 1 Computer Literacy Workshop 3
- CIS 2 Introduction to Computer Science 3
- CIS 20 Access for Windows I 1
- CIS 21 Access for Windows II 1
- CIS 22 Access for Windows III 1
- NR 83 Introduction to Global Positioning Systems (GPS) 1
Gerontology Certificate

(This program is temporarily suspended)

The Gerontology Certificate Program provides students with knowledge about the human aging process and the skills necessary to work directly in the field of aging. Students will develop the basic skills and knowledge regarding sociological, biological, and psychological aspects of a diverse aging society. Course work includes working with dementia, families, nutritional needs and death and dying issues. Students with a Gerontology Certificate are prepared to work in long term care settings, senior centers, social service agencies, adult day care, in home care and community organizations.

REQUIREMENTS CERTIFICATE:

CORE COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 60</td>
<td>Biology of Aging</td>
<td>3</td>
</tr>
<tr>
<td>GERO 77</td>
<td>Family Dynamics and Aging</td>
<td>3</td>
</tr>
<tr>
<td>SOC 22</td>
<td>Sociology of Aging</td>
<td>3</td>
</tr>
<tr>
<td>FSS 18</td>
<td>Adulthood and Aging</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition, students must choose five (5) units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 25</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>GERO 64</td>
<td>Coping With Mental Illness And Dementia In Old Age</td>
<td>3</td>
</tr>
<tr>
<td>GERO 24</td>
<td>Ethnic Diversity and Aging</td>
<td>2</td>
</tr>
<tr>
<td>GERO 75</td>
<td>Death And Dying</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 17

Horticulture

Also see Environmental Horticulture for Transfer Degree information

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

Students should contact their counselor or environmental horticulture faculty advisor to choose electives for the particular career they are planning to enter. Particular attention should be paid to course prerequisites and whether a class is taught fall or spring semester, or both.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE

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.

Recommended Course Sequence:

**First Semester (Fall)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 52</td>
<td>Computers in Environmental Resources</td>
<td>3</td>
</tr>
<tr>
<td>HORT 22</td>
<td>Nursery Practices and Plant Propagation</td>
<td>2</td>
</tr>
<tr>
<td>HORT 27</td>
<td>Plant Identification and Taxonomy</td>
<td>1</td>
</tr>
<tr>
<td>HORT 28</td>
<td>Plant Identification and Taxonomy</td>
<td>1</td>
</tr>
<tr>
<td>HORT 29</td>
<td>Plant Identification and Taxonomy</td>
<td>1</td>
</tr>
<tr>
<td>HORT 33</td>
<td>Environmental Horticulture</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education (Oral Communication) 3

**Second Semester (Spring)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 23</td>
<td>Nursery Practices and Management</td>
<td>2</td>
</tr>
<tr>
<td>HORT 35</td>
<td>Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>HORT 38</td>
<td>Landscape and Turf Management</td>
<td>3</td>
</tr>
<tr>
<td>MATH 100*</td>
<td>Technical Applications of Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education (Multicultural/Living Skills) 3

**Third Semester (Fall)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A*</td>
<td>Reading and Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENVR 44</td>
<td>Mechanical Tech. for Environ. Resources</td>
<td>3</td>
</tr>
<tr>
<td>HORT 31.1</td>
<td>Landscape Irrigation - Design</td>
<td>1</td>
</tr>
<tr>
<td>HORT 31.2</td>
<td>Landscape Irrigation - Installation</td>
<td>1</td>
</tr>
<tr>
<td>HORT 31.3</td>
<td>Landscape Irrigation – Troubleshoot and Schedule</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 56</td>
<td>Ornamental Horticulture Practices OR</td>
<td>1-4</td>
</tr>
<tr>
<td>HORT 94</td>
<td>Horticulture Worksite Learning</td>
<td>1-4</td>
</tr>
</tbody>
</table>

General Education (Humanities) 3
Horticulture A.S. Degree – continued:

Fourth Semester (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2A</td>
<td>Introduction to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENVR 24</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>HORT 7</td>
<td>Horticulture Careers Survey and Placement</td>
<td>1</td>
</tr>
<tr>
<td>HORT 26</td>
<td>Plant Protection</td>
<td>3</td>
</tr>
<tr>
<td>NR 83</td>
<td>Introduction to Global Positioning Systems (GPS)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>General Education (Social Science)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective courses to complete A.S. Degree</td>
<td>1-2</td>
</tr>
</tbody>
</table>

General Education (Social Science) 3

Elective courses to complete A.S. Degree 1-2

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>46-49</td>
</tr>
<tr>
<td>General Education</td>
<td>12</td>
</tr>
<tr>
<td>Electives</td>
<td>1-2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>60-63</td>
</tr>
</tbody>
</table>

*Can be used to fulfill General Education requirements.

1. 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.**

2. Sixty (60) units are required for the A.S. Degree. All graduation requirements are met.

REQUIREMENTS FOR HORTICULTURE CERTIFICATE:

**CORE COURSES FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 190</td>
<td>Reading and Writing II <strong>(see below for alternative)</strong></td>
<td>4</td>
</tr>
<tr>
<td>ENVR 24</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 44</td>
<td>Mechanical Tech. for Environ. Resources</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 52</td>
<td>Computers in Environmental Resources</td>
<td>3</td>
</tr>
<tr>
<td>HORT 7</td>
<td>Horticulture Careers Survey and Placement</td>
<td>1</td>
</tr>
<tr>
<td>HORT 22</td>
<td>Nursery Practices and Plant Propagation</td>
<td>2</td>
</tr>
<tr>
<td>HORT 23</td>
<td>Nursery Practices and Management</td>
<td>2</td>
</tr>
<tr>
<td>HORT 26</td>
<td>Plant Protection</td>
<td>3</td>
</tr>
<tr>
<td>HORT 27</td>
<td>Plant Identification and Taxonomy</td>
<td>1</td>
</tr>
<tr>
<td>HORT 28</td>
<td>Plant Identification and Taxonomy</td>
<td>1</td>
</tr>
<tr>
<td>HORT 29</td>
<td>Plant Identification and Taxonomy</td>
<td>1</td>
</tr>
<tr>
<td>HORT 31.1</td>
<td>Landscape Irrigation - Design</td>
<td>1</td>
</tr>
<tr>
<td>HORT 31.2</td>
<td>Landscape Irrigation - Installation</td>
<td>1</td>
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<tr>
<td>HORT 31.3</td>
<td>Landscape Irrigation - Troubleshoot and Schedule</td>
<td>1</td>
</tr>
<tr>
<td>HORT 33</td>
<td>Environmental Horticulture</td>
<td>3</td>
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<tr>
<td>HORT 35</td>
<td>Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>HORT 37</td>
<td>Nursery and Florist Management</td>
<td>3</td>
</tr>
<tr>
<td>HORT 38</td>
<td>Landscape and Turf Management</td>
<td>3</td>
</tr>
<tr>
<td>HORT 56</td>
<td>Ornamental Horticulture Practices OR</td>
<td>1-4</td>
</tr>
<tr>
<td>HORT 94</td>
<td>Horticulture Worksite Learning</td>
<td>1-4</td>
</tr>
<tr>
<td>MATH 100</td>
<td>Tech. Applications of Math or Math Placement Level 3</td>
<td>3</td>
</tr>
<tr>
<td>NR 83</td>
<td>Introduction to Global Positioning Systems (GPS)</td>
<td>1</td>
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<tr>
<td></td>
<td><strong>TOTAL UNITS FOR CERTIFICATE</strong> 44-47</td>
<td></td>
</tr>
</tbody>
</table>

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

Horticulture – Master Floral Design Certificate

This curriculum is designed to provide floral design skills for entry-level jobs within the industry and training for advancement not easily available from on-the-job training.

REQUIREMENTS FOR CERTIFICATE:

**RECOMMENDED COURSES (not required):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 45</td>
<td>Human Relations on the Job</td>
</tr>
<tr>
<td>HORT 7</td>
<td>Horticulture Careers Survey and Placement</td>
</tr>
<tr>
<td>HORT 23</td>
<td>Nursery Practices &amp; Management</td>
</tr>
<tr>
<td>HORT 27, 28, 29</td>
<td>Plant Identification and Taxonomy</td>
</tr>
<tr>
<td>HORT 97</td>
<td>Special Topics in Environmental Horticulture</td>
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Fall Semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 34</td>
<td>Beginning Floral Design – Fall Flowers</td>
<td>2</td>
</tr>
<tr>
<td>HORT 36</td>
<td>Floral Design for Weddings/Special Occasion</td>
<td>2</td>
</tr>
<tr>
<td>HORT 41</td>
<td>Selection and Care of Blooming and Tropical Plants</td>
<td>1.5</td>
</tr>
<tr>
<td>HORT 45</td>
<td>Holiday Decorations and Banquets</td>
<td>1.0</td>
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</table>

Spring Semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 37</td>
<td>Nursery and Florist Management</td>
<td>3</td>
</tr>
<tr>
<td>HORT 40</td>
<td>Intermediate Floral Design</td>
<td>2</td>
</tr>
<tr>
<td>HORT 44</td>
<td>Beginning Floral Design – Spring Flowers</td>
<td>2</td>
</tr>
</tbody>
</table>

Summer Semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 39</td>
<td>Tropical Floral Design</td>
<td>1.5</td>
</tr>
<tr>
<td>HORT 94</td>
<td>Horticulture Worksite Learning</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL UNITS FOR CERTIFICATE</strong> 16-17</td>
<td></td>
</tr>
</tbody>
</table>

*RECOMMENDED COURSES (not required):*
Horticulture - Irrigation Certificate

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.

**REQUIREMENTS FOR CERTIFICATE:**

**CORE COURSES:**
- **AGRI 25** Irrigation Practices 3
- **HORT 31** Landscape Irrigation 3
- **ENVR 24** Soils 3
- **HORT 35** Landscape Design 3

_**In addition, students must complete one**_ of the following:
- **AGRI 20** Plant Science 4
- **ENVR 44** Mechanical Technology for Environmental Resources 3
- **HORT 38** Landscape and Turf Management 3
- **HORT 56** Ornamental Horticulture Practices 1-4
- **HORT 94** Horticulture Worksite Learning 1-4

**TOTAL UNITS FOR CERTIFICATE:** 13-16

In addition to the core courses, students will need to complete additional hours of work experience in order to take the Contractor or Designers Certification Exam with the Irrigation Association. Shasta College plans on making these opportunities available through Ornamental Horticulture Practices (HORT 56) or Horticulture Worksite Learning (HORT 94). Those students taking the Certified Irrigation Contractors exam would also need skills in layout, staking, business, management, and codes.

Horticulture – Retail Nursery Sales

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.

**REQUIREMENTS FOR CERTIFICATE:**

- **HORT 23** Nursery Practices & Management 2
- **HORT 26** Plant Protection 3
- **HORT 27** Plant Identification and Taxonomy 1
- **HORT 28** Plant Identification and Taxonomy 1
- **HORT 29** Plant Identification and Taxonomy 1
- **HORT 35** Landscape Design 3
- **HORT 38** Landscape and Turf Management 3

*Choose one of the following:*
- **HORT 56** Ornamental Horticulture Practices 1-2
- **HORT 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
- **HORT 37** Nursery and Florist Management
- **MKTG 72** Advertising

Horticulture – Landscape & Turf Management

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

**REQUIREMENTS FOR CERTIFICATE:**

- **ENVR 24** Soils OR **CONS 46** Equipment Operations and Maintenance 3
- **ENVR 44** Mechanical Technology for Environmental Resources 3
- **HORT 26** Plant Protection 3
- **HORT 31.1** Landscape Irrigation - Design 1
- **HORT 31.2** Landscape Irrigation - Installation 1
- **HORT 31.3** Landscape Irrigation – Troubleshoot and Schedule 1
- **HORT 38** Landscape and Turf Management 3
- **HORT 75** Water Gardening 1
- **HORT 94** Horticulture Worksite Learning 1

**TOTAL UNITS FOR CERTIFICATE:** 17
## Hospitality – Baking – Culinary Arts Emphasis

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 106</td>
<td>Business Math or Math Placement Level 3 or higher</td>
<td>3</td>
</tr>
<tr>
<td>CULA 50</td>
<td>Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CULA 172</td>
<td>Baking</td>
<td>2</td>
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</table>

**TOTAL UNITS FOR CERTIFICATE:** 4-7

## Hospitality – Bartender – Culinary Arts Emphasis

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CULA 50</td>
<td>Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CULA 60</td>
<td>Beverage Management</td>
<td>2</td>
</tr>
<tr>
<td>CULA 73</td>
<td>Introduction to Wine</td>
<td>2</td>
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</table>

**TOTAL UNITS FOR CERTIFICATE:** 6

## Hospitality – Dining Room Management – Culinary Arts Emphasis

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BUAD 106</td>
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<td>CULA 50</td>
<td>Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CULA 65</td>
<td>Dining Room Service</td>
<td>3</td>
</tr>
<tr>
<td>CULA 73</td>
<td>Introduction to Wine</td>
<td>2</td>
</tr>
<tr>
<td>HOSP 10</td>
<td>Introduction to Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 45</td>
<td>Hospitality Law</td>
<td>2</td>
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**TOTAL UNITS FOR CERTIFICATE:** 12-15

## Hospitality – Dining Room Staff – Culinary Arts Emphasis

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>BUAD 106</td>
<td>Business Math or Math Placement Level 3 or higher</td>
<td>3</td>
</tr>
<tr>
<td>CULA 50</td>
<td>Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CULA 65</td>
<td>Dining Room Service</td>
<td>3</td>
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</table>

**TOTAL UNITS FOR CERTIFICATE:** 5-8

## Hospitality – Line Cook – Culinary Arts Emphasis

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULA 45</td>
<td>Basic Food Production</td>
<td>5</td>
</tr>
<tr>
<td>CULA 46</td>
<td>Advanced Foods</td>
<td>5</td>
</tr>
<tr>
<td>CULA 50</td>
<td>Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>HOSP 10</td>
<td>Introduction to Hospitality</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:** 15

## Hospitality – Winemaking and Marketing

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.

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULA 66</td>
<td>Wine With Food</td>
<td>2</td>
</tr>
<tr>
<td>CULA 73</td>
<td>Introduction to Wine</td>
<td>2</td>
</tr>
<tr>
<td>CULA 74</td>
<td>Basic Winemaking</td>
<td>2</td>
</tr>
<tr>
<td>CULA 76</td>
<td>Intermediate Winemaking</td>
<td>2</td>
</tr>
<tr>
<td>CULA 78</td>
<td>Sensory Evaluation of Wine</td>
<td>2</td>
</tr>
<tr>
<td>CULA 80</td>
<td>Wine Sales and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>HORT 80</td>
<td>Vineyard Construction and Design</td>
<td>1</td>
</tr>
<tr>
<td>HORT 81</td>
<td>Vineyard Care</td>
<td>1</td>
</tr>
<tr>
<td>HORT 94</td>
<td>Horticulture Worksite Learning</td>
<td>1</td>
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</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:** 16
Hospitality Management

The Shasta College Hospitality Program is designed to provide students with the basic skills, abilities and knowledge necessary to prepare them for various positions in the hotel/motels, restaurants, clubs, cafeterias, contract feeders, schools, resorts, recreation companies, airlines and cruise ship operations.

The student must complete the "CORE" courses listed below. In addition, students must satisfy all of the regular Associate in Science degree requirements. For a complete description of those requirements, please refer to the "Associate in Science" section of this catalog.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 66</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>CULA 50</td>
<td>Sanitation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>CULA 55</td>
<td>Purchasing</td>
<td>2</td>
</tr>
<tr>
<td>HOSP 10</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 40</td>
<td>Human Resources Management in the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 65</td>
<td>Hospitality Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

Hospitality Management - Casino Management Concentration

REQUIREMENTS FOR CERTIFICATE:
This certificate has been developed in response to community needs for training in the casino industry. Hospitality and tourism is one of the world's largest industry segments. In terms of gross revenues and number of employees, this is one of the fastest growing industries worldwide. Casinos make up a fundamental part of overall hospitality operations, and are considered to be the major revenue producer for many hotels and resorts around the globe. Casino operations and management here at Shasta College concentrates on students who are interested in pursuing any aspect of casino or gaming related operations.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CAS 10</td>
<td>Introduction to Casino Operations</td>
<td>2</td>
</tr>
<tr>
<td>CAS 20</td>
<td>The History of Gaming/Native American Gaming</td>
<td>1</td>
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<tr>
<td>CAS 30</td>
<td>Casino Surveillance</td>
<td>3</td>
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<tr>
<td>CAS 40</td>
<td>Casino Management and Operations</td>
<td>3</td>
</tr>
<tr>
<td>CAS 50</td>
<td>Casino Marketing/Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>CAS 94</td>
<td>Casino Management Worksite Learning</td>
<td>1-4</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 13-16

Hospitality Management - Culinary Arts Concentration

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

Recommended Course Sequence:

First Semester (Fall)
- BUAD 106 Business Mathematics 3
- CULA 45 Basic Food Production 5
- CULA 50 Sanitation and Safety 2
- FSS 25 Nutrition 3
- HOSP 10 Introduction to the Hospitality Industry 3

Second Semester (Spring)
- CULA 46 Advanced Foods 5
- CULA 49 Menu Planning and Cost Analysis 2
- CULA 55 Purchasing 2
- CULA 94 Culinary Arts Works Site Learning 1
- CULA 161 The Art of Garde Manger 2
- HOSP 40 Human Resource Management in the Hospitality Industry 3

Third Semester (Fall)
- CIS 1 Computer Literacy Workshop 3
- CULA 60 Beverage Management 2
- CULA 65 Dining Room Service 3
- CULA 94 Culinary Arts Worksite Learning 1
- CULA 172 Baking 2
- HOSP 65 Hospitality Supervision 3

Fourth Semester (Spring)
- BUAD 66 Business Communications 3

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>TOTAL</td>
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</table>
## Hospitality Management-Culinary Arts Concentration – continued:

### REQUIREMENTS FOR CERTIFICATE:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td>BUAD 106</td>
<td>Business Mathematics</td>
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<tr>
<td></td>
<td>CULA 45</td>
<td>Basic Food Production</td>
<td>5</td>
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<td></td>
<td>CULA 50</td>
<td>Sanitation and Safety</td>
<td>2</td>
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<tr>
<td></td>
<td>FSS 25</td>
<td>Nutrition</td>
<td>3</td>
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<tr>
<td></td>
<td>HOSP 10</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
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<tr>
<td><strong>Second Semester</strong></td>
<td>CULA 46</td>
<td>Advanced Foods</td>
<td>5</td>
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<td></td>
<td>CULA 49</td>
<td>Menu Planning and Cost Analysis</td>
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<td></td>
<td>CULA 55</td>
<td>Purchasing</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CULA 94</td>
<td>Culinary Arts Worksite Learning</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CULA 161</td>
<td>The Art of Garde Manger</td>
<td>2</td>
</tr>
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<td></td>
<td>HOSP 40</td>
<td>Human Resource Management in the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CULA 60</td>
<td>Beverage Management</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CULA 65</td>
<td>Dining Room Service</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CULA 94</td>
<td>Culinary Arts Worksite Learning</td>
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<td></td>
<td>CULA 172</td>
<td>Baking</td>
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<td></td>
<td>HOSP 65</td>
<td>Hospitality Supervision</td>
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</table>

**TOTAL UNITS FOR CERTIFICATE**: 45

### Hospitality Management - Hotel/Restaurant Management Concentration

#### REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

**Recommended Course Sequence:**

<table>
<thead>
<tr>
<th>Semester (Fall)</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
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<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
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<tr>
<td>CULA 50</td>
<td>Safety and Sanitation</td>
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<td></td>
</tr>
<tr>
<td>HOSP 10</td>
<td>Introduction to the Hospitality Industry</td>
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<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUAD 66</td>
<td>Business Communications</td>
<td>3</td>
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<tr>
<td>BUAD 80</td>
<td>Customer Service</td>
<td>3</td>
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<tr>
<td>CULA 55</td>
<td>Purchasing</td>
<td>2</td>
<td></td>
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<tr>
<td>HOSP 20</td>
<td>Hospitality Operations Management</td>
<td>3</td>
<td></td>
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<tr>
<td>HOSP 94</td>
<td>Hospitality Worksite Learning</td>
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<table>
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<tr>
<td>HOSP 35</td>
<td>Computer Applications in the Hospitality Industry</td>
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<td>HOSP 45</td>
<td>Legal Aspects of the Hospitality Industry</td>
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<td>HOSP 50</td>
<td>Hospitality Marketing, Sales and Advertising</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HOSP 65</td>
<td>Hospitality Supervision</td>
<td>3</td>
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<tr>
<td>HOSP 94</td>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CULA 73</td>
<td>Introduction to Wines OR</td>
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<td>CULA 66</td>
<td>Wine with Food</td>
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<td>HOSP 40</td>
<td>Human Resource Management in the Hospitality Industry</td>
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<td>HOSP 60</td>
<td>Hospitality and Financial Management</td>
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<td>HOSP 94</td>
<td>Hospitality Worksite Learning</td>
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### Associate in Science Degree Requirements

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#### REQUIREMENTS FOR CERTIFICATE:

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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUAD 80</td>
<td>Principles of Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 10</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 20</td>
<td>Hospitality Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 35</td>
<td>Computer Applications in the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 40</td>
<td>Human Resource Management in the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 94</td>
<td>Hospitality Worksite Learning</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE**: 17
Industrial Technology Certificate

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.

REQUIREMENTS FOR CERTIFICATE:

- DIES 48  Hydraulics  3.5
- ELEC 138  Fundamentals of Electronics and Electricity  4
- INDE 101  Industrial Occupation Basics  3
- MATH 100  Technical Applications of Mathematics  3
- WELD 70  Beginning Welding  3

TOTAL UNITS FOR CERTIFICATE:  16.5

Journalism

This curriculum is designed to provide preparation for careers in newspaper and magazine editorial work, advertising and graphics, television and radio news, or public relations; and to provide a study of the media of mass communications for those students who feel it would contribute to their liberal education.

REQUIREMENTS FOR CERTIFICATE:

- JOUR 21  Introduction to Mass Communications  3
- JOUR 24  Newspaper Production  6
- JOUR 27  Newswriting and Reporting  3
- JOUR 29  Photojournalism  2
- MKTG 70  Sales OR MKTG 72 Advertising  3
- SPCH 10  Interpersonal Communication  3

TOTAL UNITS FOR CERTIFICATE:  20

REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE:

Students must complete the courses required for the Certificate. In addition, students must fulfill the 33-39-unit general education pattern for CSU or IGETC.

<table>
<thead>
<tr>
<th>Associate in Arts Degree Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
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<tr>
<td>General Education</td>
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<td>Electives</td>
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<tr>
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</tbody>
</table>

Legal Assistant

The Legal Assistant Program is designed to prepare individuals for employment as legal assistants in law firms, corporations, banks, insurance companies, and government agencies. Legal assistants are also referred to as paralegals. The legal assistant, under the supervision of an attorney, provides a variety of services to lawyers and clients. These may include research, investigation, interviewing clients or witnesses, preparing depositions, and drafting legal memoranda and briefs. The legal assistant can do any type of legal work that does not involve giving advice to clients or representing clients in court. The faculty for this program consists of practicing attorneys. Classes are offered in the evening only.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

Recommended Course Sequence:

First Semester (Fall)

- LEGL 139  Introduction to Paralegalism  3
- LEGL 140  Legal Research and Writing I  3
- LEGL 144  Civil Procedure and Litigation  3
- General Education  6

Second Semester (Spring)

- CIS 1  Computer Literacy Workshop  3
- LEGL 141  Legal Research and Writing II  3
- LEGL 142  Discovery  3
- General Education  6

Third Semester (Fall)

- LEGL 143  Real Estate Law  3
- LEGL 145  Torts  3
- LEGL 147  Contracts, Employment and Agency  2
- General Education  6

Fourth Semester (Spring)

- LEGL 94  Legal Assistant Worksite Learning  2
- LEGL 148  Family Law  3
- LEGL 149  Commercial Law  2
- LEGL 153  Probate  3
Legal Assistant A.S. Degree – continued:

Required Major Electives: Choose six (6) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUAD 6</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 8</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 94</td>
<td>Legal Assistant Worksite Learning</td>
<td>1-2</td>
</tr>
<tr>
<td>LEGL 146</td>
<td>Bankruptcy Practices</td>
<td>2</td>
</tr>
<tr>
<td>LEGL 150</td>
<td>Business Organizations</td>
<td>2</td>
</tr>
<tr>
<td>LEGL 151</td>
<td>Estate Planning</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 152</td>
<td>Collections and Judgments</td>
<td>2</td>
</tr>
<tr>
<td>LEGL 155</td>
<td>Techniques of Interview and Investigation</td>
<td>2</td>
</tr>
<tr>
<td>LEGL 156</td>
<td>Criminal Law and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OAS 91</td>
<td>Word for Windows I</td>
<td>1</td>
</tr>
<tr>
<td>OAS 162</td>
<td>Legal Form Preparation</td>
<td>3</td>
</tr>
</tbody>
</table>

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>42</td>
</tr>
<tr>
<td>Additional General Education</td>
<td>18</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
</tr>
</tbody>
</table>

Life Management

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.

All courses to be applied to the Life Management Certificate must be completed with a “C” grade or better.

REQUIREMENTS FOR CERTIFICATE:

Students must complete the courses listed below with a “C” grade or better:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 1</td>
<td>Human Development</td>
<td>3</td>
</tr>
<tr>
<td>FSS 16</td>
<td>Marriage and Family</td>
<td>3</td>
</tr>
<tr>
<td>FSS 60</td>
<td>Life Management</td>
<td>3</td>
</tr>
<tr>
<td>FSS 25</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FSS 46</td>
<td>Personal Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 15

Music

REQUIREMENTS FOR ASSOCIATE IN ARTS DEGREE:

Students must complete the courses required for the Certificate. In addition, students fulfill the 33-39 unit general education pattern for CSU or IGTC.

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 above-listed major requirements, will be required to show proficiency in the following areas: theory, keyboard skills, vocal skills, music history/appreciation, and applied musicianship. Such students should successfully complete 4 units of Directed Independent Study/Music classes in addition to the major requirements listed above. Directed independent study classes are for full-time music majors and are for collegiate study on individual instruments or voice. Directed independent study requires permission of instructor to enroll.

Recommended Course Sequence:

First Semester (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 2</td>
<td>Diatonic Harmony and Musicianship</td>
<td>5</td>
</tr>
<tr>
<td>MUS 30-60</td>
<td>Two Music Ensembles (1 required for core)</td>
<td>2</td>
</tr>
<tr>
<td>MUS 61*</td>
<td>Performance Analysis</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Directed Independent Study/Music</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Electives</td>
<td></td>
</tr>
</tbody>
</table>

Second Semester (Spring)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 3</td>
<td>Diatonic Harmony and Musicianship</td>
<td>5</td>
</tr>
<tr>
<td>MUS 30-60</td>
<td>Two Music Ensembles (1 required for core)</td>
<td>2</td>
</tr>
<tr>
<td>MUS 61*</td>
<td>Performance Analysis</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Directed Independent Study/Music</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Electives</td>
<td></td>
</tr>
</tbody>
</table>

Third Semester (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 4</td>
<td>Chromatic Harmony</td>
<td>5</td>
</tr>
<tr>
<td>MUS 30-60</td>
<td>Two Music Ensembles (1 required for core)</td>
<td>2</td>
</tr>
<tr>
<td>MUS 61*</td>
<td>Performance Analysis</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Directed Independent Study/Music</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Electives</td>
<td></td>
</tr>
</tbody>
</table>

Fourth Semester (Spring)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 5</td>
<td>20th Century Harmony</td>
<td>5</td>
</tr>
<tr>
<td>MUS 30-60</td>
<td>Two Music Ensembles (1 required for core)</td>
<td>2</td>
</tr>
<tr>
<td>MUS 61*</td>
<td>Performance Analysis</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Directed Independent Study/Music</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Electives</td>
<td></td>
</tr>
</tbody>
</table>

\* Required Music CORE Course

\* Highly Recommended
Music A.A. Degree – continued:

**Recommended Elective Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1</td>
<td>Music Fundamentals (pre-Music Major only)</td>
</tr>
<tr>
<td>MUS 7</td>
<td>Beginning Arranging and Songwriting</td>
</tr>
<tr>
<td>MUS 10</td>
<td>Music Appreciation (valid for G.E.)</td>
</tr>
<tr>
<td>MUS 11</td>
<td>History of Jazz and Rock (valid for G.E.)</td>
</tr>
<tr>
<td>MUS 12</td>
<td>Introductions to Computers and Elect. Inst. in Music</td>
</tr>
<tr>
<td>MUS 22</td>
<td>Beginning Piano (pre-Music Major only)</td>
</tr>
<tr>
<td>MUS 29/30</td>
<td>Beginning/Intermediate Voice</td>
</tr>
<tr>
<td>MUS 61</td>
<td>Performance Analyses</td>
</tr>
</tbody>
</table>

**Associate in Arts Degree Requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>24</td>
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<tr>
<td>General Education</td>
<td>33-39</td>
</tr>
<tr>
<td>Electives</td>
<td>0-3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>60</td>
</tr>
</tbody>
</table>

**Requirements for Certificate:**

Completion of this Certificate will prepare the student for employment in retail music merchandising and private music instruction.

**MUS 2**  Diatonic Harmony and Musicianship  5
**MUS 3**  Diatonic Harmony and Musicianship  5
**MUS 4**  Chromatic Harmony  5
**MUS 5**  20th Century Harmony  5

Choose four (4) units from the following (one per semester):

**MUS 30-60**  Music Ensembles (Small or Large)  4

TOTAL UNITS FOR CERTIFICATE:  24

**Natural Resources**

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.

**Requirements for Associate in Science Degree:**

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.

**Recommended Course Sequence:**

**First Semester (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 52</td>
<td>Computers in Environmental Resources</td>
<td>3</td>
</tr>
<tr>
<td>GIS 90</td>
<td>Working with GIS</td>
<td>1</td>
</tr>
<tr>
<td>MATH</td>
<td>Math Competency/Analytical Thinking Requirement</td>
<td>3</td>
</tr>
<tr>
<td>NR 1</td>
<td>Introduction to Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>NR 66</td>
<td>Watershed Restoration Practicum</td>
<td>1</td>
</tr>
<tr>
<td>NR 83</td>
<td>Introduction to GPS</td>
<td>1</td>
</tr>
</tbody>
</table>

**Second Semester (Spring)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 44</td>
<td>Mechanical Technology for Environmental Resources</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 10</td>
<td>Map Reading and Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>NR 6</td>
<td>Native Plant Identification</td>
<td>3</td>
</tr>
<tr>
<td>NR 8</td>
<td>Career Placement for Natural Resources</td>
<td>1</td>
</tr>
<tr>
<td>NR 50</td>
<td>Natural Resource Measurements</td>
<td>3</td>
</tr>
<tr>
<td>SPCH</td>
<td>Oral Communication Requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Summer Session**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 94</td>
<td>Environmental Resources Worksite Learning</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>General Education (Multicultural/Living Skills)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Third Semester (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 60</td>
<td>Environmental Science (Area 1-General Ed)</td>
<td>3</td>
</tr>
<tr>
<td>NR 59</td>
<td>Outdoor Recreation and Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>NR 64</td>
<td>Water Resources</td>
<td>3</td>
</tr>
<tr>
<td>NR 65</td>
<td>Forest Ecology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fourth Semester (Spring)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL</td>
<td>English Composition Requirement</td>
<td>4</td>
</tr>
<tr>
<td>ENVR 24</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>NR 70</td>
<td>Wildlife Management and Conservation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education (Humanities)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education (Social Science)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Associate in Science Degree Requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>51</td>
</tr>
<tr>
<td>General Education</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>60</td>
</tr>
</tbody>
</table>

*Note: Suggested courses: BUAD 45 and FSS 60

*Can be used to fulfill General Education requirements.

1. Students planning to transfer to a college or university should consult a counselor or Natural Resource Faculty Advisor regarding transfer requirements.
Natural Resources Program – continued:

**REQUIREMENTS FOR CERTIFICATE:**

**Fall Semester**
- ENVR 52 Computers in Environmental Resources 3
- GEOG 10** Map Reading and Interpretation 3
- NR 1 Introduction to Natural Resources 3
- NR 65 Forest Ecology 3

**Spring Semester**
- GIS 90 Working with GIS 1
- NR 6 Native Plant Identification 3
- NR 50 Natural Resources Measurements 3
- NR 66** Watershed Restoration Practicum 1
- NR 83 Introduction to GPS 1
- NR 70 Wildlife Conservation and Management 3

**Summer Semester**
- ENVR 94 Worksite Learning 1

**TOTAL UNITS FOR CERTIFICATE** 25

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

---

**Nurse Aide/Home Health Aide**

Curriculum for this course is designed to prepare a student to work in any one of several health care situations, (acute care hospital, long term care, and home care).

Students, at their expense, are required to have a physical examination and immunizations prior to entering the Nurse Aide/Home Health Aide course. Students must meet established physical criteria to participate in the clinical area and have a current Basic CPR card Class C.

**REQUIREMENTS FOR CERTIFICATE:**

- HEOC 180 Nurse Aide/Home Health Aide 13

**TOTAL UNITS FOR CERTIFICATE:** 13

---

**Nursing – Associate Degree Nursing (for students starting in 2006-07)**

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, at their expense, are required to have a physical examination and necessary immunizations prior to entering the Associate Degree Nursing program. Students must meet established physical criteria to participate in the clinical area, have a current Basic Life Support – Health Care Provider card (includes two-person rescue and infant resuscitation).

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.

**Graduation Requirements:**
1. Completion of the Humanities requirement.
2. Completion of competence in mathematics. *MATH 101 Basic Algebra or MATH 100 Technical Application of Mathematics are the advised courses for meeting this requirement.*

Due to the time commitments of the A.D.N. program, it is strongly recommended to complete the graduation requirements before entering the program.

**ENROLLMENT CRITERIA FOR THE PROGRAM:**

Students filing enrollment packets must be a high school graduate or equivalent. The "PREREQUISITE SCIENCE" courses listed below must be completed with a 2.5 GPA.

**PREREQUISITE COURSES:**

- ANAT 1 Anatomy 5
- MICR 1 *Microbiology 5
- PHY 1 Physiology (with lab) 5
- ENGL 1A Reading and Composition 4
- SOC 1 Introduction to Sociology 3
- SOC 2 Social Problems 3
- PSYC 1A General Psychology 3
- PSYC 14 Understanding Human Behavior 3

Students must complete the remaining "PREREQUISITE" courses listed below with a grade of "C" or better in each course.
Choose one of the following:

- SPCH 10 Interpersonal Communication 3
- SPCH 60 Public Speaking 3
- SPCH 54 Small Group Communication 3

TOTAL UNITS OF PREREQUISITES: 28

*Check course description for prerequisite

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

Students must be enrolled into the ADN program. Students must then complete the courses listed below.

**Course Sequence:**

**First Semester**
- REGN 1 Theoretical Foundations of Nursing Care 7
- REGN 2 Clinical Foundations of Nursing Care 5

**Second Semester**
- REGN 10 Theoretical Concepts of Medical Surgical Nursing I 7
- REGN 11 Clinical Concepts of Medical Surgical Nursing I 4.5
- REGN 12 Assessment Concepts of Medical Surgical Nursing .5

**Third Semester**
- REGN 20 Theor Concepts of Family/Mat-Child Nursing & Med Surg Nursing II 7
- REGN 21 Clinical Concepts of Family/Maternal-Child & Med Surg Nursing II 5

**Fourth Semester**
- REGN 30 Concepts of Mental Health and Community-Based Nursing 4
- REGN 31 Theoretical Concepts of Medical Surgical Nursing III 4
- REGN 32 Clinical Concepts of the Continuum of Adult Healthcare 4

TOTAL UNITS FOR MAJOR: 48

NOTE: In order to progress through the nursing courses, students must demonstrate competence in both the theory and clinical components. Failing or withdrawing from any one of the semester’s corequisite courses requires withdrawal from all of that semester’s corequisite courses.

Students with previous nursing education who have been enrolled in a class will be given the opportunity to receive units and credit toward completion of the A.S. degree program by challenge in theory and clinical performance (this is only after being enrolled in the class). Licensed Vocational Nurses may apply for the LVN-RN Associate Degree Nursing 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 in nursing and ten (10) units of related science. REGN 20X, REGN 21X, REGN 30X, REGN 31X and REGN 32X are the required 20 units of nursing plus microbiology and physiology the required 10 units of science. Students must see nursing program director if considering this option.

**ENROLLMENT CRITERIA FOR THE LVN-RN PROGRAM**

Beginning spring 2008, students filing enrollment packets for the LVN-RN program must complete the following prerequisite science courses listed below with a GPA of 2.5. Prior to spring 2008 a grade of C or better will be accepted.

**Prerequisite Courses:**
- ANAT 1 Anatomy 5
- MICR 1* Microbiology 5
- PHY 1 Physiology (with lab) 5

Students filing enrollment packs for the LVN-RN program must complete the remaining prerequisite courses listed below with a grade of C or higher.
- ENGL 1A Reading and Composition 4
- Choose one of the following: 3
  - PSYC 1A General Psychology
  - PSYC 14 Understanding Human Behavior
- Choose one of the following: 3
  - SOC 1 Introduction to Sociology
  - SOC 2 Social Problems
- Choose one of the following: 3
  - SPCH 10 Interpersonal Communication
  - SPCH 54 Small Group Communication
  - SPCH 60 Public Speaking
- REGN 79 LVN-RN Transition 2

*Check course description for prerequisite

TOTAL UNITS FOR PREREQUISITES 30

LVN-RN applicants will also need to complete graduation requirements prior to submitting an application packet.

**Graduation Requirements:**
1. High school diploma or equivalent
2. Completion of the Humanities requirement
3. Completion of competence in mathematics (MATH 101 Basic Algebra or MATH 100 Technical Application of Mathematics is the advised course for meeting this requirement)
Nursing – Associate Degree Nursing (for existing students)

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, at their expense, are required to have a physical examination and necessary immunizations prior to entering the Associate Degree Nursing program. Students must meet established physical criteria to participate in the clinical area, have a current Basic Life Support—Health Care Provider card (includes two-persons rescue and infant resuscitation), provide proof of drug testing and a completed background check.

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.

Graduation Requirements:
3. Completion of the Humanities requirement.
4. Completion of competence in mathematics. MATH 101 Basic Algebra or MATH 100 Technical Application of Mathematics are the advised courses for meeting this requirement.

Due to the time commitments of the A.D.N. program, it is strongly recommended to complete the graduation requirements before entering the program.

ENROLLMENT CRITERIA FOR THE PROGRAM:
Students filing enrollment packets must be a high school graduate or equivalent. The "PREREQUISITE SCIENCE" courses listed below must be completed with a 3.0 GPA.

PREREQUISITE COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1</td>
<td></td>
</tr>
<tr>
<td>MICR 1</td>
<td></td>
</tr>
<tr>
<td>PHY 1</td>
<td></td>
</tr>
</tbody>
</table>

Students must complete the remaining "PREREQUISITE" courses listed below with a grade of "C" or better in each course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A</td>
<td>4</td>
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</table>

Choose one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1A</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 14</td>
<td>3</td>
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</table>

Choose one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 10</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 60</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 54</td>
<td>3</td>
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</tbody>
</table>

TOTAL UNITS OF PREREQUISITES: 28

*Check course description for prerequisite

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:
Students must be enrolled into the ADN program. Students must then complete the courses listed below.

Course Sequence:

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>REGN 60</td>
<td>6</td>
</tr>
<tr>
<td>REGN 61</td>
<td>6</td>
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</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGN 70</td>
<td>7</td>
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<tr>
<td>REGN 71</td>
<td>4.5</td>
</tr>
<tr>
<td>REGN 72</td>
<td>0.5</td>
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</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGN 80</td>
<td>4</td>
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<td>REGN 81</td>
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<tr>
<td>REGN 82</td>
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</table>

**Fourth Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGN 90</td>
<td>6</td>
</tr>
<tr>
<td>REGN 91</td>
<td>6</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR MAJOR: 48

NOTE: In order to progress through the nursing courses, students must demonstrate competence in both the theory and clinical components. Failing or Withdrawing from any one of the semester’s corequisite courses requires withdrawal from all of that semester’s corequisite courses.

Licensed Vocational Nurses and students with previous nursing education who have been enrolled in a class will be given the opportunity to receive units and credit toward completion of the A.S. degree program by challenge in theory and clinical performance (this is only after being enrolled in the class). LVNs may elect to take a non-degree program consisting of twenty (20) units in nursing and ten (10) units of related science.
Nursing – Vocational Nursing

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.

Space in the program is limited to 30 students. A new class is enrolled every three semesters. In order to be eligible for enrollment, students must satisfy the prerequisites listed below.

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.

PREREQUISITES TO VOCATIONAL NURSING PROGRAM:
1. Students must have a high school diploma or equivalent.
2. Students must be a current Certified Nurse Aide.
3. Students must complete the following courses with a "C" grade or better.
   - BIOL 5: Introduction to Human Biology 3
   - BIOL 6: Human Biology Lab 1
   - ECE 1: Human Development 3
   - FSS 25: Nutrition 3
   - PSYC 14: Understanding Human Behavior 3

REQUIREMENTS FOR CERTIFICATE:
Students must be enrolled in the program in order to take the courses listed below. Students, at their expense, are required to have a physical examination and immunizations prior to entering the program. Students must meet established physical criteria to participate in the clinical area, have a current Basic CPR card Class C, provide proof of drug testing, and a completed background check.

Students must complete the courses below in order to receive the certificate:
- VO CN 160: Foundations of Nursing Practice 15
- VO CN 161: Nursing of Adults 13
- VO CN 162: Nursing of Adults and Children 13

TOTAL UNITS FOR CERTIFICATE: 41

NOTE: Students must show competence in both clinical and theory components (a "C" grade or better) in order to progress through the curriculum. A failing clinical grade results in removal from the program regardless of the theory grade.

RECOMMENDED COURSES (Not required):
- ENGL 190 Reading and Writing II
- HEOC 110 Beginning Medical Terminology
- MATH 220 Pre-Algebra

Office Administration

This certificate is designed to prepare the student for an entry-level clerical position such as clerical office assistant, clerk typist, data entry clerk, file clerk, general office clerk, or receptionist.

In addition, for the AS degree the student must satisfy all of the regular AS degree requirements. For a complete description of those requirements, please refer to the "Associate in Science" section of this catalog. ► Some required courses listed below may also satisfy general education requirements.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th># of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 45</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 166</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Keyboarding I-Beginning Typing</td>
<td>3</td>
</tr>
<tr>
<td>OAS 91</td>
<td>Word for Windows-I</td>
<td>1-3</td>
</tr>
<tr>
<td>OAS 52</td>
<td>Keyboarding II-Intermediate Typing</td>
<td>3</td>
</tr>
<tr>
<td>OAS 64</td>
<td>Computerized Ten-Key</td>
<td>0.5</td>
</tr>
<tr>
<td>OAS 157</td>
<td>Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OAS 166</td>
<td>Records Management</td>
<td>2</td>
</tr>
<tr>
<td>OAS 171</td>
<td>Proofreading Skills</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL CORE UNITS: 17.5-19.5

► Indicates required courses that may also satisfy General Education requirements
√ Indicates a core course in the semester sequencing
* Upon completion of OAS 51 with a grade of C or better, OAS 91 is not necessary. If you are proficient in keyboarding, you may be able to take OAS 91 in lieu of OAS 51. See your counselor if you think you might qualify.
Office Administration – Administrative Assistant

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:
This curriculum provides training for students interested in possessing a mastery of office skills. The program is designed for students to enter the office support service of government, business, and industry. It shares many of the same courses as the Information Processing Specialist program.

Recommended Course Sequence:

First Semester (Fall)
- BUAD 166 √ Business English 3
- CIS 1 √ Computer Literacy Workshop 3
- OAS 51 √ Keyboarding I-Beginning Typing OR OAS 91 √ Word for Windows-I 1-3
- OAS 64 √ Computerized Ten-Key 0.5
- OAS 157 √ Office Procedures 3

Second Semester (Spring)
- BUAD 45 √ Human Relations on the Job 3
- BUAD 106 √ Business Mathematics 3
- CIS 10 √ Excel for Windows-I
- CIS 70 √ Windows I 1
- CIS 80 √ Internet Basics 1
- OAS 52 √ Keyboarding II-Intermediate Typing 3
- OAS 92 √ Word for Windows II 1

Third Semester (Fall)
- ACCT 101 √ Basic Accounting I 3
- OAS 53 √ Keyboarding III  3
- OAS 58 √ Word Processing Transcription 3
- OAS 171 √ Proofreading Skills 2
- Any Elective 3.5-5.5
- General Education 3

Fourth Semester (Spring)
- BUAD 66 √ Business Communications 3
- OAS 60 √ Office Troubleshooting 1
- OAS 80 √ Outlook 1
- OAS 94 √ PowerPoint 1
- OAS 166 √ Records Management 2
- General Education 6

Highly recommended electives:
- CIS 20 √ Access for Windows-I 1
- CIS 81 √ Web Design (Front Page I) 1
- OAS 63 √ Voice Recognition Software 1
- OAS 93 √ Word for Windows-III 1
- OAS 96 √ Integrated Computer Applications 2
- OAS 152 √ Keyboarding for Speed and Accuracy 0.5

*Upon completion of OAS 51 with a grade of C or higher, OAS 91 is not necessary. If you are proficient in keyboarding, you may be able to take OAS 91 in lieu of OAS 51. See your counselor if you think you might qualify.

Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Major</th>
<th>42.5 - 44.5</th>
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</thead>
<tbody>
<tr>
<td>Additional General Education</td>
<td>12</td>
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<tr>
<td>Electives</td>
<td>3.5-5.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Office Administration – Administrative Assistant – Legal

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:
Designed for the student to acquire entry-level skills in the legal secretarial field. Students will develop skills in transcription and develop knowledge of legal terms. The student will become familiar with the law office, the court structure, litigation, family law, wills and probate, corporations, real estate, bankruptcy, and criminal law.

Recommended Course Sequence:

First Semester (Fall)
- LEGL 139 √ Introduction to Paralegalism 3
- LEGL 144 √ Civil Procedures and Litigation 3
- OAS 51 √ Keyboarding I-Beginning Typing 3
- OAS 157 √ Office Procedures 3
- General Education 3

Second Semester (Spring)
- BUAD 45 √ Human Relations on the Job 3
- BUAD 166 √ Business English 3
- LEGL 142 √ Discovery 3
- OAS 52 √ Keyboarding II-Intermediate Typing 3
- OAS 64 √ Computerized Ten-Key 0.5
- General Education 3
### Office Administration – Administrative Assistant – Legal A.S. Degree – continued:

#### Third Semester (Fall)
- **CIS 1** Computer Literacy Workshop 3
- **LEGL 140** Legal Research and Writing 3
- **OAS 58** Word Processing Transcription 3
  - General Education 6

#### Fourth Semester (Spring)
- **ACCT 101** Basic Accounting I 3
- **BUAD 66** Business Communications 3
- **LEGL 94** Worksite Learning 1-4
- **OAS 162** Legal Form Preparation 3
  - Any Elective 0-1.5
  - General Education 3

#### Highly recommended electives:
- **BUAD 8** Business Law 3
- **BUAD 106** Business Mathematics 3
- **CIS 20** Access for Windows – I 1
- **CIS 80** Internet Basics 1
- **CIS 81** Web Design (Front Page I) 1
- **OAS 63** Voice Recognition Software 1
- **OAS 80** Outlook 1
- **OAS 92** Word for Windows II 1
- **OAS 96** Integrated Computer Applications 2
- **OAS 152** Keyboarding for Speed and Accuracy 0.5
- **OAS 166** Records Management 2
- **OAS 171** Proofreading Skills 2

#### Associate in Science Degree Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Units</th>
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<tbody>
<tr>
<td><strong>Major</strong></td>
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<td><strong>Additional General Education</strong></td>
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<td><strong>Electives</strong></td>
<td>0-1.5</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>60-61.5</td>
</tr>
</tbody>
</table>

### Office Administration - Clerical Assistant

#### REQUIREMENTS FOR CERTIFICATE:
- **BUAD 166** Business English 3
- **CIS 10** Excel for Windows – I 1
- **CIS 70** Windows I 1
- **OAS 51** Keyboarding I (Beginning Typing) 3
- **OAS 52** Keyboarding II (Intermediate Typing) 3
- **OAS 64** Computerized 10-Key 0.5
- **OAS 80** Outlook 1
- **OAS 94** PowerPoint 1
- **OAS 152** Keyboarding for Speed and Accuracy 0.5
- **OAS 157** Office Procedures 3

**TOTAL UNITS FOR CERTIFICATE** 17

### Office Administration - Information Processing Specialist

The Information Processing Specialist Program is designed to prepare students with the skills necessary to enter the office support service of government, business, and industry. Students will gain competency in word processing, spreadsheet, database and desktop publishing applications. This program shares many of the same courses as the Office Administration - Administrative Assistant degree, but includes more information processing courses. Upon completion of the program, the student will have the ability to meet the demands of the office.

#### REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

##### First Semester (Fall)
- **BUAD 166** Business English 3
- **CIS 1** Computer Literacy Workshop 3
- **CIS 70** Windows I 1
- **OAS 51** Keyboarding I-Beginning Typing **OR**
- **OAS 91** Word for Windows-I 1-3
- **OAS 64** Computerized Ten-Key 0.5
- **OAS 157** Office Procedures 3
Office Administration – Information Processing Specialist A.S. Degree – continued:

Second Semester (Spring)
- BUAD 106 Business Mathematics 3
- CIS 10 Excel for Windows-I 1
- CIS 11 Excel for Windows-II 1
- CIS 80 Internet Basics 1
- OAS 52√ Keyboarding II-Intermediate Typing 3
- OAS 92 Word for Windows-II 1
- OAS 93 Word for Windows-III 1
- OAS 171√ Proofreading Skills 2
- General Education 3

Third Semester (Fall)
- BUAD 45√ Human Relations on the Job 3
- CIS 20 Access for Windows-I 1
- CIS 21 Access for Windows-II 1
- OAS 58 Word Processing Transcription 3
- OAS 94 PowerPoint 1
- OAS 166√ Records Management 2
- General Education 3
- Any Elective 2.5-4.5

Fourth Semester (Spring)
- BUAD 66 Business Communications 3
- CIS 81 Web Design (Front Page I) 1
- OAS 52√ Keyboarding II-Intermediate Typing 3
- OAS 58 Word Processing Transcription 3
- OAS 60 Office Troubleshooting 1
- OAS 80 Outlook 1
- OAS 94 PowerPoint 1
- OAS 171√ ProofreadingSkills 2

Highly Recommended Elective:
- OAS 63 Voice Recognition Software 1
- OAS 152 Keyboarding for Speed and Accuracy 0.5

*Upon completion of OAS 51 with a grade of C or higher, OAS 91 is not necessary. If you are proficient in keyboarding, you may be able to take OAS 91 in lieu of OAS 51. See your counselor if you think you might qualify.

<table>
<thead>
<tr>
<th>Associate in Science Degree Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
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<tr>
<td>Electives</td>
<td>2.5-4.5</td>
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<tr>
<td>TOTAL</td>
<td>60</td>
</tr>
</tbody>
</table>

Requirements for Certificate:

First Semester (Fall)
- BUAD 166√ Business English 3
- CIS 1 Computer Literacy Workshop 3
- CIS 70 Windows I 1

*OAS 51√ Keyboarding I-Beginning Typing OR
*OAS 91√ Word for Windows-I 1-3

- OAS 64√ Computerized Ten Key 0.5
- OAS 157√ Office Procedures 3
- OAS 166√ Records Management 2

Second Semester (Spring)
- BUAD 45√ Human Relations on the Job 3
- CIS 10 Excel for Windows-I 1
- CIS 20 Access for Windows-I 1
- CIS 80 Internet Basics 1
- OAS 52√ Keyboarding II-Intermediate Typing 3
- OAS 58 Word Processing Transcription 3
- OAS 60 Office Troubleshooting 1
- OAS 80 Outlook 1
- OAS 94 PowerPoint 1
- OAS 171√ ProofreadingSkills 2

TOTAL UNITS FOR CERTIFICATE: 30.5-32.5

Highly Recommended Electives:
- OAS 63 Voice Recognition Software 1
- OAS 92 Word for Windows-II 1
- OAS 93 Word for Windows-III 1
- OAS 96 Integrated Computer Applications 1
- OAS 152 Keyboarding for Speed and Accuracy 0.5

*Upon completion of OAS 51 with a grade of C or higher, OAS 91 is not necessary. If you are proficient in keyboarding, you may be able to take OAS 91 in lieu of OAS 51. See your counselor if you think you might qualify.
Office Administration — Medical Billing Specialist

This program is designed to prepare the student for an entry-level position as a medical billing specialist to prepare claims for health care facilities, clinics, physicians’ offices, medical equipment companies, and medical billing service companies. Upon completion of this program, the graduate should have the necessary knowledge and skills to secure employment in either the medical provider or health carrier sectors.

REQUIREMENTS FOR CERTIFICATE:

Recommended Course Sequence:

**First Semester (Fall)**
- BUAD 45 Human Relations on the Job 3
- BUAD 166 Business English 3
- HEOC 110 Medical Terminology 3
- *OAS 51 Keyboarding I-Beginning Typing OR
- *OAS 91 Word for Windows-I 1-3
- OAS 64 Computerized Ten-Key 0.5
- OAS 158 Medical Office Procedures 3

**Second Semester (Spring)**
- HEOC 111 Advanced Medical Terminology 3
- OAS 52 Keyboarding II-Intermediate Typing 3
- OAS 112 Basic ICD-9-CM and CPT-4 Coding 3
- OAS 150 Medical Insurance Billing 3
- OAS 171 Proofreading Skills 2

TOTAL UNITS FOR CERTIFICATE 27.5-29.5

*Upon completion of OAS 51 with a grade of C or higher, OAS 91 is not necessary. If you are proficient in keyboarding, you may be able to take OAS 91 in lieu of OAS 51. See your counselor if you think you might qualify.*

Office Administration – Medical Office Specialist

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, and related clerical duties essential to medical office assisting.

REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:

Recommended Course Sequence:

**First Semester (Fall)**
- BUAD 45 Human Relations on the Job 3
- BUAD 106 Business Mathematics 3
- BUAD 166 Business English 3
- OAS 51 Keyboarding I-Beginning Typing OR
- OAS 91 Word for Windows-I* 1-3
- OAS 64 Computerized Ten-Key 0.5
- General Education 3

**Second Semester (Spring)**
- ACCT 101 Basic Accounting I 3
- HEOC 110 Medical Terminology 3
- OAS 52 Keyboarding II-Intermediate Typing 3
- OAS 63 Voice Recognition Software 1
- OAS 158 Medical Office Procedures 3
- OAS 171 Proofreading Skills 2

**Third Semester (Fall)**
- BUAD 66 Business Communications 3
- HEOC 111 Advanced Medical Terminology 3
- OAS 53 Keyboarding III—Adv. And Technical Typing 3
- OAS 112 Basic ICD-9-CM and CPT-4 Coding 3
- OAS 159 Word Processing I - Medical Transcription 1.5
- General Education 3

**Fourth Semester (Spring)**
- ACCT 103 PC Accounting 2
- OAS 113 Advanced ICD-9-CM and CPT-4 Coding 3
- OAS 150 Medical Insurance Billing 3
- OAS 160 Word Processing II-Med. Transcription 1.5
- General Education 6

Highly recommended electives:
- CIS 10 Excel for Windows-I 1
- CIS 20 Access for Windows-I 1
- CIS 80 Internet Basics 1
- OAS 92 Word for Windows II 1
- OAS 152 Keyboarding for Speed and Accuracy 0.5

*Upon completion of OAS 51 with a grade of C or higher, OAS 91 is not necessary. If you are proficient in keyboarding, you may be able to take OAS 91 in lieu of OAS 51. See your counselor if you think you might qualify.*

<table>
<thead>
<tr>
<th>Associate in Science Degree Requirements</th>
<th></th>
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<tbody>
<tr>
<td>Major</td>
<td>48.5-50.5</td>
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<tr>
<td>Additional General Education</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60.5-62.5</td>
</tr>
</tbody>
</table>
Office Administration – Records Manager

This curriculum is designed to enable the student to develop an understanding of the field of records management - the criteria by which records were created, stored, retrieved, and disposed of; clear-cut rules for alphabetic, numeric, subject, and geographic filing; the foundation of records storage methods; and principles for the selection of records personnel, equipment, and supplies.

**REQUIREMENTS FOR CERTIFICATE:**

**Recommended Course Sequence:**

<table>
<thead>
<tr>
<th>First Semester (Fall)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 166 (\checkmark) Business English</td>
<td>3</td>
</tr>
<tr>
<td>CIS 70</td>
<td>Windows I</td>
</tr>
<tr>
<td>*OAS 51 (\checkmark) Keyboarding I-Beginning Typing \textbf{OR}</td>
<td></td>
</tr>
<tr>
<td>*OAS 91 (\checkmark) Word for Windows-I</td>
<td>1-3</td>
</tr>
<tr>
<td>OAS 157</td>
<td>Office Procedures</td>
</tr>
<tr>
<td>OAS 166</td>
<td>Records Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester (Spring)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>BUAD 45</td>
<td>Human Relations on the Job</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
</tr>
<tr>
<td>CIS 20</td>
<td>Access for Windows-I</td>
</tr>
<tr>
<td>OAS 52</td>
<td>Keyboarding II-Intermediate Typing</td>
</tr>
<tr>
<td>OAS 64</td>
<td>Computerized Ten-Key</td>
</tr>
<tr>
<td>OAS 92</td>
<td>Word for Windows-II</td>
</tr>
<tr>
<td>OAS 171</td>
<td>Proofreading</td>
</tr>
</tbody>
</table>

**Highly Recommended Electives:**

|  |
|--------------------------|--|
| CIS 21 | Access for Windows-II | 1 |
| OAS 93 | Word for Windows-III | 1 |
| OAS 152 | Speed, Accuracy, Refresher Typing | 0.5 |

**TOTAL UNITS FOR CERTIFICATE** 23.5-25.5

*Upon completion of OAS 51 with a grade of C or higher, OAS 91 is not necessary. If you are proficient in keyboarding, you may be able to take OAS 91 in lieu of OAS 51. See your counselor if you think you might qualify.

Office Administration – Transcriptionist – Medical

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

This program is designed to prepare the student for a position as an entry-level transcriptionist in a medical office, health care facility, or any office where transcriptionist skills are required.

**Recommended Course Sequence:**

<table>
<thead>
<tr>
<th>First Semester (Fall)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 166 (\checkmark) Business English</td>
<td>3</td>
</tr>
<tr>
<td>*OAS 51 (\checkmark) Keyboarding I-Beginning Typing \textbf{OR}</td>
<td></td>
</tr>
<tr>
<td>*OAS 91 (\checkmark) Word for Windows-I</td>
<td>1-3</td>
</tr>
<tr>
<td>OAS 64</td>
<td>Computerized Ten-Key</td>
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<tr>
<td>OAS 158</td>
<td>Medical Office Procedures</td>
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<tr>
<td>OAS 171</td>
<td>Proofreading Skills</td>
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<tr>
<td>General Education</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Second Semester (Spring)</th>
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<tbody>
<tr>
<td>HEOC 110</td>
<td>Medical Terminology</td>
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<td>OAS 52</td>
<td>Keyboarding II-Intermediate Typing</td>
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<td>OAS 58</td>
<td>Word Processing Transcription</td>
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<td>OAS 166</td>
<td>Records Management</td>
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<td>Any Electives</td>
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<table>
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<th>Third Semester (Fall)</th>
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<tbody>
<tr>
<td>BUAD 45</td>
<td>Human Relations on the Job</td>
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<tr>
<td>BUAD 66</td>
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<tr>
<td>HEOC 111</td>
<td>Advanced Medical Terminology</td>
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<td>OAS 93</td>
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<tr>
<th>Fourth Semester (Spring)</th>
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<tbody>
<tr>
<td>BIOL 5</td>
<td>Introduction to Human Biology</td>
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<td>BIOL 6</td>
<td>Introduction to Human Biology Lab</td>
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<td>OAS 53</td>
<td>Keyboarding III-Adv. and Technical Typing</td>
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<tr>
<td>OAS 159</td>
<td>Word Processing I - Med. Transcription</td>
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<tr>
<td>OAS 160</td>
<td>Word Processing II - Med. Trans.</td>
</tr>
<tr>
<td>General Education</td>
<td>6</td>
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</table>
Office Administration – Transcriptionist - Medical A.S. Degree – continued:

Highly Recommended Electives:
- CIS 80 Internet Basics 1
- OAS 63 Voice Recognition Software 1
- OAS 152 Keyboarding for Speed and Accuracy 0.5

<table>
<thead>
<tr>
<th>Associate in Science Degree Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
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<tr>
<td>Additional General Education</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

*Upon completion of OAS 51 with a grade of C or higher, OAS 91 is not necessary. If you are proficient in keyboarding, you may be able to take OAS 91 in lieu of OAS 51. See your counselor if you think you might qualify.

REQUIREMENTS FOR CERTIFICATE:
This program is designed to prepare the student for a position as a secretary or a transcriptionist in a medical office, or any office where transcriptionist skills are required.

Recommended Course Sequence:

First Semester (Fall)
- BUAD 166 Business English 3
- *OAS 51* Keyboarding I-Beginning Typing OR *OAS 91* Word for Windows-I 1-3
- OAS 64 Computerized Ten-Key 0.5
- OAS 158 Medical Office Procedures 3
- OAS 171 Proofreading Skills 2

Second Semester (Spring)
- BUAD 45 Human Relations on the Job 3
- HEOC 110 Medical Terminology 3
- OAS 52 Keyboarding II-Intermediate Typing 3
- OAS 58 Word Processing Transcription 3
- OAS 92 Word for Windows II 1
- OAS 166 Records Management 2

Third Semester (Fall)
- BUAD 66 Business Communications 3
- HEOC 111 Advanced Medical Terminology 3
- OAS 53 Keyboarding III-Adv. and Technical Typing 3
- OAS 159 Word Processing I-Medical Trans. 1.5
- OAS 160 Word Processing II-Medical Trans. 1.5

Highly recommended electives:
- CIS 80 Internet Basics 1
- OAS 93 Word for Windows-III 1

**TOTAL UNITS FOR CERTIFICATE:** 36.5-38.5

*Upon completion of OAS 51 with a grade of C or higher, OAS 91 is not necessary. If you are proficient in keyboarding, you may be able to take OAS 91 in lieu of OAS 51. See your counselor if you think you might qualify.

Real Estate
Provides training for people who wish to enter the real estate industry, including such fields as general real estate sales and brokerage financing, appraising and escrow. Because of its highly competitive nature, it is recommended that students seek advisement from a counselor to channel their efforts toward one of the specific areas. A real estate license will be required to enter certain fields of employment.

REQUIREMENTS FOR CERTIFICATE:
Students must complete the "CORE" courses and choose six (6) units from the "ELECTIVE" courses listed below.

<table>
<thead>
<tr>
<th>Core Courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 6 Business Law 3</td>
</tr>
<tr>
<td>REAL 30 Real Estate Principles 3</td>
</tr>
<tr>
<td>REAL 31 Real Estate Practice 3</td>
</tr>
<tr>
<td>REAL 32 Real Estate Appraisal 3</td>
</tr>
<tr>
<td>REAL 33 Legal Aspects of Real Estate 3</td>
</tr>
<tr>
<td>REAL 34 Real Estate Finance 3</td>
</tr>
<tr>
<td>ACCT 101 Basic Accounting I OR</td>
</tr>
<tr>
<td>REAL 135 Real Estate Economics 3</td>
</tr>
<tr>
<td>REAL 136 Introduction to Escrow OR</td>
</tr>
<tr>
<td>REAL 138 Advanced Real Estate Appraisal 3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CORE:** 24
Real Estate Certificate – continued:

**Elective Courses:** Select at least six (6) units for the Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 8</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 41</td>
<td>Leadership and Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 44</td>
<td>Investments</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 66</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 91</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 166</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop <strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>CIS 2</td>
<td>Introduction to Computer Science</td>
<td>3-4</td>
</tr>
<tr>
<td>ECON 1A</td>
<td>Principles of Economics - Micro</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 7</td>
<td>California Geography</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 70</td>
<td>Sales</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 72</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 74</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Keyboarding I-Beginning Typing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units for Certificate:** 30

**Residential Care Counselor Training**

*This program is temporarily suspended.*

The program is designed to provide students with the needed expertise to work with individuals with special needs, including those in residential care.

**Requirements for Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUSV 130</td>
<td>Principles and Practices of Residential Care Counselors</td>
<td>3</td>
</tr>
<tr>
<td>HUSV 131</td>
<td>Crisis Management</td>
<td>3</td>
</tr>
<tr>
<td>HUSV 132</td>
<td>Intro to Mental Disorders</td>
<td>3</td>
</tr>
<tr>
<td>HUSV 133</td>
<td>Residential Care Regulations</td>
<td>3</td>
</tr>
<tr>
<td>HUSV 134</td>
<td>Residential Care Practicum Seminar</td>
<td>2</td>
</tr>
<tr>
<td>HUSV 135</td>
<td>Counseling/Communication in Residential Care</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units for Certificate:** 17

**Retail Management**

This program is designed to enable students to find entry-level positions in the retail selling areas as sales personnel.

**Requirements for Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 41</td>
<td>Leadership and Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 45</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 66</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 91</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 74</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 176</td>
<td>Retail Management</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 10</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units for Certificate:** 30

**Theatre Arts**

**Requirements for Certificate:**

Students must complete the courses listed below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1</td>
<td>Introduction to Theatre</td>
<td></td>
</tr>
<tr>
<td>THTR 8</td>
<td>Theatre Appreciation I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 12</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 23/26</td>
<td>Mainstage Production I/II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 30</td>
<td>Stagecraft I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 41</td>
<td>Theatre Laboratory</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition, students must complete:

- Six units from the following Theory courses: 6
  - THTR 5, 9, 13, 29, 31, 34, 37, 81

- Four units from the following Practicum courses: 4
  - THTR 24, 25, 42, 60

**Total Units for Certificate:** 26
Theatre Arts - Continued:

Requirements for Associate in Arts Degree:
Students must complete the courses required for the Certificate. In addition, students fulfill the 33-39-unit general education pattern for CSU or IGETC.

<table>
<thead>
<tr>
<th>Associate in Arts Degree Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
</tr>
<tr>
<td>General Education</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

Transition Certificate for Students with Intellectual Disabilities
This curriculum is designed to provide an integrated and inclusive educational option, in a post-secondary setting, structured to equip each student for a more meaningful style of participation in community, vocational and independent living settings.

Requirements for Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADAP 210 Career Development</td>
<td>1</td>
</tr>
<tr>
<td>ADAP 254 Adapted Computer Skills: Semester 1</td>
<td>1</td>
</tr>
<tr>
<td>ADAP 254 Adapted Computer Skills: Semester 2</td>
<td>1</td>
</tr>
<tr>
<td>ADAP 255 Human Awareness: Semester 1</td>
<td>2</td>
</tr>
<tr>
<td>ADAP 255 Human Awareness: Semester 2</td>
<td>2</td>
</tr>
<tr>
<td>ADAP 256 Reading for Life Skills: Semester 1</td>
<td>2</td>
</tr>
<tr>
<td>ADAP 256 Reading for Life Skills: Semester 2</td>
<td>2</td>
</tr>
<tr>
<td>ADAP 258 Math for Life Skills: Semester 1</td>
<td>2</td>
</tr>
<tr>
<td>ADAP 258 Math for Life Skills: Semester 2</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 15

Veterinary Technician
The main program goal is to provide hands-on training to students interested in becoming Registered Veterinary Technicians (RVT). They will also receive the practical field experience working under a licensed veterinarian that is required in order to take the RVT exam. They will gain competencies in the following areas: a) veterinary anatomy, physiology, and medical terminology; b) veterinary practices; c) fundamentals of animal health technology; d) health and diseases of animals; e) veterinary radiology and imaging; f) veterinary anesthesiology, surgical assisting and dentistry; and g) care of exotic and laboratory animals.

The revised core courses in Veterinary Technology are being offered this year and have a lab component. The courses are mostly being held at the Haven Humane Society Veterinary Clinic facility that is equipped with the most up-to-date equipment. One of the advantages of having the new degree program is that students will be required to get work experience with a licensed veterinarian while taking classes, and should be able to complete the majority of required hours by the time they graduate. For more information or additional requirements, or for students pursuing the alternate route, they should obtain the Alternate Route Workbook from the California Veterinary Medical Association.

Requirements for Associate in Science Degree:

Recommended Course Sequence:

**First Semester (Fall)**
- ENVR 1 Career Planning for Environmental Resources 2
- SPCH 54* Small Group Communication 3
- VETT 1 Veterinary Anatomy, Physiology & Medical Terminology 4
- MATH 100* Technical Applications of Math 3
- AGRI 16 Veterinary Practices 2
- STU 92 Worksite Readiness 1
- ENVR 94 Environmental Resources Worksite Learning 2

**Second Semester (Spring)**
- CHEM 10* Chemistry for Liberal Arts 3
- AGRI 19 Principles of Animal Science 3
- BUAD 66* Business Communications OR ENGL 1A* Reading and Composition 3-4
- VETT 2 Fundamentals of Animal Health Technology 4
- ENVR 94 Environmental Resources Worksite Learning 2
- General Education (Humanities) 3

**Third Semester (Fall)**
- VETT 3 Health and Disease of Animals 4
- FSS 25* Nutrition 3
- ENVR 94 Environmental Resources Worksite Learning 2
- VETT 4 Veterinary Radiology and Imaging 2
- General Education (Social Sciences) 3
Veterinary Technician A.S. Degree – continued:

**Fourth Semester (Spring)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VETT 5</td>
<td>Vet. Anesthesiology, Surgical Assist. and Dentistry</td>
<td>4</td>
</tr>
<tr>
<td>AGRI 11</td>
<td>Feeds and Feeding</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 94</td>
<td>Environmental Resources Worksite Learning</td>
<td>2</td>
</tr>
<tr>
<td>VETT 6</td>
<td>Care of Exotic and Laboratory Animals</td>
<td>1</td>
</tr>
<tr>
<td>AGRI 6</td>
<td>Career Placement Agriculture</td>
<td>1</td>
</tr>
</tbody>
</table>

*Can be used to fulfill General Education requirements.

<table>
<thead>
<tr>
<th>Associate in Science Degree Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
</tr>
<tr>
<td>General Education</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

**Watershed Restoration Certificate**

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 regulations, mapping, water quality, data collection, recent advances in erosion control and bio-engineering applications and techniques, and heavy equipment operations.

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 46</td>
<td>Equipment Operation and Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 47</td>
<td>Project Construction for Equipment Operations</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 10</td>
<td>Map Reading and Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>NR 50</td>
<td>Natural Resources Measurements</td>
<td>3</td>
</tr>
<tr>
<td>NR 64</td>
<td>Water Resources</td>
<td>3</td>
</tr>
<tr>
<td>NR 66</td>
<td>Watershed Restoration</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 17

**Water/Wastewater Treatment**

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.

**REQUIREMENTS FOR CERTIFICATE**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTT 177</td>
<td>Introduction to Wastewater Treatment</td>
<td>3</td>
</tr>
<tr>
<td>WTT 180</td>
<td>Introduction to Water Treatment Tech</td>
<td>3</td>
</tr>
<tr>
<td>WTT 181</td>
<td>Intermediate Water Treatment Technology</td>
<td>3</td>
</tr>
<tr>
<td>WTT 183</td>
<td>Intermediate Wastewater Treatment</td>
<td>3</td>
</tr>
<tr>
<td>WTT 184</td>
<td>Small Water Systems and Distribution</td>
<td>3</td>
</tr>
<tr>
<td>WTT 186</td>
<td>Advanced Wastewater Treatment</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 18

**Welding Technology**

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
- Certificates from Shasta College in Welding Technology
- Certification by the American Welding Society as a certified welder

**REQUIREMENTS FOR ASSOCIATE IN SCIENCE DEGREE:**

**Recommended Course Sequence:**

**First Semester (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 118</td>
<td>Blueprint and Specification Reading (Mechanical)</td>
<td>2</td>
</tr>
<tr>
<td>INDE 1</td>
<td>Career Planning for Industrial Technology</td>
<td>1</td>
</tr>
<tr>
<td>MATH 100</td>
<td>Technical Applications of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Beginning Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 170</td>
<td>Introduction to ARC Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 174</td>
<td>Structural Steel MIG Welding</td>
<td>3</td>
</tr>
</tbody>
</table>
Welding Technology A.S. Degree – continued:

**Second Semester (Spring)**
- DIES 48  Hydraulics  4.5
- ENGL 190*  Reading and Writing II **(see below for alternative)  4
- WELD 171  Intermediate ARC Welding  3
- WELD 173  Structural Steel Metal Fabrication  3
- WELD 178  Pipe Welding Fundamentals  3

**Third Semester (Fall)**
- WELD 175  TIG Welding  3
- WELD 182  Advanced ARC Welding  1
- WELD 184  Advanced GTAW (TIG) Welding  1
- WELD 188  Advanced GMAW (MIG) Welding  1
- General Education  9

**Fourth Semester (Spring)**
- WELD 186  Advanced Pipe Welding  2
- General Education  6
- Electives  4.5

**Suggested Electives:**
- BUAD 41  Leadership and Supervision  3
- CONS 53  Materials of Construction  3
- DIES 30  Hydraulic Troubleshooting  1
- ENGR 120  Mechanical Drawing  2
- IS 99  Independent Study  0.5-2
- PHSC 1  Physical Science Survey  4
- PHYS 101  Technical Physics  3
- WELD 94  Worksite Learning for Welding Technology  1-4
- WELD 176  GMAW (MIG) Welding  3

**Associate in Science Degree Requirements**

<table>
<thead>
<tr>
<th>Major</th>
<th>40.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>15</td>
</tr>
<tr>
<td>Electives</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

Can be used to fulfill General Education requirements.

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

**REQUIREMENTS FOR CERTIFICATE (ONE-YEAR/FAST TRACK PROGRAM):**

**Recommended Course Sequence:**

**First Semester (Fall)**
- ENGR 118  Blueprint & Specification Reading  2
- INDE 1  Career Planning  1
- MATH 100  Technical Applications of Mathematics  3
- WELD 70  Beginning Welding  3
- WELD 170  Introduction to ARC Welding  3
- WELD 174  Structural Steel MIG Welding  3

**Second Semester (Spring)**
- DIES 48  Hydraulics  4.5
- ENGL 190*  Reading and Writing II **(see below for alternative)  4
- WELD 171  Intermediate ARC Welding  3
- WELD 173  Structural Steel Metal Fabrication  3
- WELD 175  TIG Welding  3
- WELD 178  Pipe Welding Fundamentals  3

**TOTAL UNITS FOR FAST TRACK**  **35.5**

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

**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
- WELD 184  Advanced GTAW (TIG) Welding  1
- WELD 186  Advanced Pipe Welding  2
- WELD 188  Advanced GMAW (MIG) Welding  1
ACCOUNTING (ACCT)

See Also: BUAD, CIS, MKTG, OAS, REAL

ACCT 2  INTRODUCTION TO FINANCIAL ACCOUNTING – 3 Units (CAN# BUS 2) (CAN# BUS SEQ A) (S)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A beginning accounting course for the student planning on transferring to a four-year university. Students will learn how accounting meets the information needs of various users of financial statements by developing and communicating information that is useful in decision making. The course is a prerequisite for ACCT 4, Introduction to Managerial Accounting. This course may be offered in a distance learning format.

ACCT 4  INTRODUCTION TO MANAGERIAL ACCOUNTING – 3 Units (CAN# BUS 4) (CAN# BUS SEQ A) (F/S)
Prerequisite: A grade of C or higher in ACCT 2 (CAN BUS 2)
Advisory: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A continuation of ACCT 2. Topics for Managerial Accounting: Fundamental accounting concepts, classifications, cost systems, and budgeting for the analysis and report of accounting information for planning, control, and decision making. Required for transfer business and accounting majors needing one semester of managerial accounting. This course may be offered in a distance learning format.

ACCT 97  SPECIAL TOPICS IN ACCOUNTING – .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in accounting. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

ACCT 98  SPECIAL LAB TOPICS IN ACCOUNTING – .5-2 Units (CR/NC Option) (I)
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing topics/knowledge in accounting. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

ACCT 101  BASIC ACCOUNTING I – 3 Units (F/S)
Class Hours: 54 lecture/18 lab total (when offered in the Distance Education format, hours will total 180)
A beginning course based on the double-entry bookkeeping system with an emphasis on a procedural approach. Topics include: accrual, cash, and modified cash basis of accounting systems; the accounting cycle, transaction analysis (rules of debits and credits), journalizing, posting, worksheets, preparation of financial statements, adjusting, closing, and reversing entries; combination journal; petty cash; bank reconciliations; special journals, accounts receivable, accounts payable; and basic payroll procedures. The course culminates with the student keeping a set of books using special journals for a small merchandising sole proprietorship for the last month of the fiscal year. This course is not transferable to a four-year college or university. This course may be offered in a distance learning format.

ACCT 102  BASIC ACCOUNTING II – 3 Units (S)
Prerequisite: A grade of C or higher in ACCT 101 or ACCT 2
Class Hours: 54 lecture/18 lab total (when offered in the Distance Education format, hours will total 180)
A continuation of ACCT 101 maintaining the procedural approach. Topics include: accounting for notes payable, notes receivable, inventories, fixed assets, partnerships, corporations, long-term debt, and cash flows. The course culminates with the student keeping a manual set of books for a small merchandising partnership for the last month of the fiscal year. This course is not transferable to a four-year college or university. This course may be offered in a distance learning format.

ACCT 103  PC ACCOUNTING – 2 Units (S)
Prerequisite: A grade of C or higher in ACCT 101 or ACCT 2
Advisory: Ability to type 25 wpm strongly recommended
Class Hours: 18 lecture/54 lab total
Accounting on microcomputers emphasizes the major areas of a computerized accounting system. This course provides the student with hands-on opportunities to determine procedure, analyze transactions, 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.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.
**ACCT 104**  
**PAYROLL ACCOUNTING** – 2 Units (S)  
**Prerequisite:** A grade of C or higher in ACCT 101 or ACCT 2; and BUAD 106 or Math Placement Level 3 or higher  
**Advisory:** A grade of C or higher in OAS 64  
**Class Hours:** 36 lecture/18 lab total  
*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 learning format.*

**ACCT 194**  
**INCOME TAX** – 3 Units (F)  
**Class Hours:** 54 lecture total  
*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.*

### ADAPTIVE STUDIES (ADAP)

**ADAP 100**  
**SELF-MANAGED LEARNING FOR STUDENTS WITH DISABILITIES** *(formerly SPED 100)* – 3 Units (CR/NC Option) (F/S)  
**Class Hours:** 36 lecture/54 lab 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 personal goals, counseling, the college experience, career exploration, study skills and college support services and programs. The law and the disabled will be discussed.*

**ADAP 101**  
**ADAPTIVE ASSESSMENT AND COMPUTING** *(formerly SPED 101)* – 1 Unit (CR/NC Option) (F/S)  
**Class Hours:** 54 lab total  
*Adaptive Assessment and Computing is designed for students with learning disabilities that desire more understanding of the adaptive tools available for use with computer technology. After being individually assessed for learning disabilities and adaptive computer needs, each student will be learning ways of tailoring the computer to more effectively manage their specific learning disability. Note: *This course may be repeated three times for a total of 4 enrollments since course content varies and skills are enhanced by supervised repetition and practice.*

**ADAP 210**  
**CAREER PLANNING AND DEVELOPMENT** – 1 Unit (CR/NC Option) (F/S)  
**Class Hours:** 18 lecture total  
*This course is designed as a career development and planning option for transitioning students who have disabilities. The content of the course is designed to assist students in the processes of 1) Finding a career that coincides with their individual interests and talents, 2) Matching personality assets to career characteristics, 3) Training in the researching of career choices and employment opportunities, 4) Matching vocational skills to career choices, 5) Developing and initiating an education/career plan consisting of goals and options, 6) Identifying educational opportunities available to attain career goals, 7) Identifying the impact of paid work upon SSI and SSDI.*

**ADAP 240**  
**ADAPTIVE DRAWING AND PAINTING** *(formerly SPED 240/SPED 240AD)* – 1-2 Units (CR/NC Option) (F/S)  
**Class Hours:** 54-108 lab total  
*A beginning to intermediate course exploring basic drawing, painting and expressive art techniques. This course will provide an introduction to basic art mediums such as: colored pens and pencils, graphite, pastels, ink, mixed media, watercolor and/or acrylics. It is designed to meet the developmental/individual needs of learning disabled students and/or those with adaptive needs. Note: *This class may be repeated three times for a total of four enrollments since course content varies and supervised repetition and practice enhance skills.*

**ADAP 254**  
**ADAPTED COMPUTER SKILLS** *(formerly SPED 254)* – 1 Unit (CR/NC Option) (F/S)  
**Class Hours:** 54 lab total  
*Adapted Computer Skills is recommended for students who have developmental disabilities and who are planning to participate in the supported employment or supported living options that are evolving in our community as alternatives to congregated adult programs and services. Course content will include the use of adapted computer instructional strategies and adaptations (behavior analysis, software and/or hardware), personal digital equipment and software programs aimed toward increasing academic, vocational and social skill levels. An evaluation to select appropriate adaptive computer software and hardware for completion of instructional tasks will be completed individually with each student. A detailed analysis completed with each student will be used to individualize instructional plans. E-mail and Internet access, using assistive adaptations, will be included within the instructional regimen. The use of personal digital environments will be included in order to enhance generalization of skills to multiple environments. Note: *This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.*

**ADAP 255**  
**HUMAN AWARENESS** *(formerly SPED 255)* – 2 Units (CR/NC Option) (I)  
**Class Hours:** 18 lecture/54 lab total  
*This course is being provided as a much more focused curricular offering in social-sexual education skills for students who have developmental disabilities (significant cognitive deficits). As opportunities for people with developmental disabilities have broadened from the limited options available in segregated day programs, the skills necessary for responsible independence in the community, such as those broadly categorized as self-protection, for example, are seen by educators in the field as essential. The aim of this course is to prepare students to tackle the rights as well as the responsibilities of adult 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 over the course of four semesters: 1) Self-awareness/self-esteem, 2) Health and hygiene, 3) Self-protection, and 4) Relationships. Note: *Since the subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.*
ADAP 256  READING FOR LIFE SKILLS (formerly SPED 256) – 2 Units (CR/NC Option) (I)

Class Hours: 18 lecture/54 lab total
This course is designed to meet the vocational preparation needs of students who have developmental disabilities. The objectives of the course are specifically designated in the Student Educational Contract, (SEC), that is individually prepared with each student. The student who is preparing for employment in the near term should consider the course. Training may include familiarity with educational symbols, sight vocabulary, and frequently encountered public signs, word attack skills and reading comprehension. Note: This class may be repeated three times for four enrollments as skills and supervised repetition and practice enhance proficiencies.

ADAP 258  MATHEMATICS FOR LIFE SKILLS (formerly SPED 258) – 2 Units (CR/NC Option) (F/S)

Class Hours: 18 lecture/54 lab total
The course is designed to meet the needs of the student with significant cognitive deficits for independent living and vocational preparation training. The objectives of the course are specifically designated in the Student Educational Contract, (SEC), that is individually prepared for each student. The course should be considered for the student who is preparing for employment and independent living in the near term. Training may include, personal budget, measurements, time clocks and scheduling, interpreting pay stub information, determining the effects of supported employment on SSI payments, calculator use, and support for regular education course work in math. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice and amount to an accommodation to student learning styles.

ADAP 297  SPECIAL TOPICS IN SPECIAL EDUCATION (formerly SPED 297) – .5-2.0 Units (CR/NC Option) (I)

Class hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with special education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

ADAP 298  SPECIAL TOPICS IN SPECIAL EDUCATION (formerly SPED 298) – 0.5-2.0 Units (CR/NC Option) (I)

Class hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics dealing with special education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

ADAP 373  COMMUNITY INVOLVEMENT (formerly SPED 373) – 0 Units (CR/NC Option) (F/S)

Note: This course is designed specifically for adults with developmental disabilities who are able to function independently in a group setting
Class Hours: 27-108 lab total
This course is for adults with developmental disabilities who desire to participate in service organizations within their communities. Students will nominate and elect class officers, who will conduct each meeting. Students will participate in meetings, either as officer or general member, using simplified Robert’s Rules of Order. With guidance of the instructor, students will determine an appropriate project (i.e., to put on a spaghetti dinner fundraiser for Special Olympics), break the project into specific tasks, volunteer for the tasks, and complete the project. Note: This course is designed specifically for adults with developmental disabilities who are able to function independently in a group setting. This class may be repeated 3 times for a total of 4 enrollments since course content varies and supervised repetition and practice enhance skills.

ADAP 377  VOCATIONAL EDUC. FOR PERSONS WITH DISABILITIES (formerly SPED 377) – 0 Units (CR/NC Option)(F/S)

Class Hours: 27-270 lab total
This course is for adults with developmental disabilities who attend a site-based vocational workshop on a regular basis. This course will teach students the fundamentals of specific jobs, such as teacher’s aide, mailroom clerk, and/or ground maintenance. This course will also teach students general information regarding finding and keeping a job, such as filling out applications, appropriate behaviors, and safety. This course will also cover general information that could be applied to many other jobs, i.e., telling time, handling money, measurement (both linear and volume), and avoiding illness. This course is designed specifically for adults with developmental disabilities who are able to function independently in a group setting.

ADJU 10  INTRODUCTION TO ADMINISTRATION OF JUSTICE – 3 Units (CR/NC Option) (CAN# AJ 2) (F)

Class Hours: 54 lecture total
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. Required for Administration of Justice majors.

ADJU 11  TRAFFIC CONTROL AND INVESTIGATION – 3 Units (CR/NC Option) (S/I)

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.

“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year. Subject to change. Check the current class schedule.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Required for</th>
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<tbody>
<tr>
<td>ADJU 15</td>
<td>CONCEPTS OF CRIMINAL LAW – 3 Units (CR/NC Option) (CAN# AJ4) (S)</td>
<td></td>
<td>54</td>
<td>Administration of Justice majors</td>
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<td>Class Hours: 54 lecture total</td>
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<td>Historical development and philosophy of law. Definitions, concepts, specific Penal Code sections and their application to the criminal justice system. Principles of constitutional, federal, state and civil laws as they apply to and affect law enforcement; rights, duties and limitation of officers and citizens structure, definition, and case study of applicable sections of the Health and Safety Code and other related codes.</td>
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<td>ADJU 16</td>
<td>LEGAL ASPECTS OF EVIDENCE – 3 Units (CR/NC Option) (CAN# AJ 8) (S)</td>
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<td>Administration of Justice majors</td>
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<td>Class Hours: 54 lecture total</td>
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<td>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.</td>
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<td>ADJU 17</td>
<td>PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM – 3 Units (CR/NC Option) (F)</td>
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<td>Administration of Justice majors</td>
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<td>Class Hours: 54 lecture total</td>
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<td>The 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.</td>
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<td>ADJU 18</td>
<td>COMMUNITY RELATIONS – 3 Units (CR/NC Option) (S)</td>
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<td>Administration of Justice majors</td>
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<td>Class Hours: 54 lecture total</td>
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<td>An in-depth exploration of the roles of the Administration of Justice practitioners and their agencies. Through interaction and study the student will become aware of the interrelationship and role expectations among the various agencies and the public. Principal emphasis will be placed upon the professional image of the system of justice administration and the development of positive relationships between members of the system and the public.</td>
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<td>ADJU 20</td>
<td>PRINCIPLES OF INVESTIGATION – 3 Units (CR/NC Option) (CAN# AJ 8) (F)</td>
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<td>Administration of Justice majors</td>
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<td>Class Hours: 54 lecture total</td>
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<td>The study of basic principles of all types of investigation utilized in the justice system. Coverage will include human aspects in dealing with the public, specific knowledge necessary for handling crime scenes; interviews, evidence, surveillance, follow-up, technical resources and case preparation.</td>
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<td>ADJU 21</td>
<td>POLICE FIELD OPERATIONS – 3 Units (CR/NC Option) (S)</td>
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<td>Administration of Justice majors</td>
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<td>Class Hours: 54 lecture total</td>
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<td>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.</td>
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<td>ADJU 22</td>
<td>JUVENILE PROCEDURES – 3 Units (CR/NC Option) (I)</td>
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<td>Class Hours: 54 lecture total</td>
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<td>The organization, functions and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures.</td>
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<td>ADJU 23</td>
<td>CAREER PLANNING FOR ADMINISTRATION OF JUSTICE – 3 Units (CR/NC Option) (F)</td>
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<td>Class Hours: 54 lecture total</td>
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<td>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.</td>
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<td>ADJU 24</td>
<td>MULTI-CULTURAL ISSUES IN LAW ENFORCEMENT – 3 Units (CR/NC Option) (I)</td>
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<td>Class Hours: 54 lecture total</td>
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<td>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.</td>
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<td>ADJU 25</td>
<td>SUBSTANTIVE LAW – 3 Units (CR/NC Option) (I)</td>
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<td>Class Hours: 54 lecture total</td>
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<td>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.</td>
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<td>ADJU 26</td>
<td>COURTROOM TESTIMONY AND REPORT WRITING – 3 Units (CR/NC Option) (F)</td>
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<td>54</td>
<td>Administration of Justice majors</td>
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<td>Class Hours: 54 lecture total</td>
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<td>Provides practical instruction and experience in the proper techniques of report writing and courtroom presentation of 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.</td>
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<td>ADJU 30</td>
<td>WILDLIFE LAW ENFORCEMENT - 3 Units (CR/NC Option) (I)</td>
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<td>Class Hours: 54 lecture total</td>
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<td>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.</td>
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ADJU 40  
**INSTITUTIONAL AND FIELD SERVICES** – 3 Units (CR/NC Option) (I)

*Class Hours:* 54 lecture total  
This course shall cover the philosophy and history of correctional services. A survey of the correctional sub-systems of institutions by type and function, probation concepts, and parole operations is presented. A discussion of correctional employee responsibilities as applied to offender behavior modification via supervisory control techniques is discussed, as well as, rehabilitation goals as they affect individual and inmate cultural groups in both confined and field settings. This course may be offered in a distance learning format.

ADJU 41  
**FUNDAMENTALS OF CRIME AND DELINQUENCY** – 3 Units (CR/NC Option) (I)

*Class Hours:* 54 lecture total  
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.

ADJU 42  
**INTERVIEWING AND COUNSELING** – 3 Units (CR/NC Option) (I)

*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 60  
**CHILD ABUSE ASSESSMENT AND REPORTING** (formerly ADJU 150S) – .5 Unit (CR/NC) (I)

*Class Hours:* 9 lecture total  
Designed to provide training for those who are required to have child abuse assessment and reporting training such as child care and health care workers, social workers, criminal justice workers, marriage and family and child counselors. It will cover child abuse laws as they pertain to the detection and reporting of abuse and assessment. It will provide information on prevention, counseling, interviewing, and referral. This would also be appropriate for teachers, foster parents, and others who work with children.

ADJU 94  
**ADMINISTRATION OF JUSTICE WORKSITE LEARNING** – 1-4 Units (CR/NC Option) (F/S)

*Limitation on Enrollment:* To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.  
*Note:* During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)  
*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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ADJU 100  
**P.C. 832 ARREST COURSE** – 2 Units (CR/NC Option) (F/S)

*Note:* This course does not include P.C. 832 Firearms Training. Students wishing to receive such training need to concurrently enroll in ADJU 102. 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.  
*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** (formerly ADJU 110) – .5 Unit (CR/NC Only) (F/S)

*Corequisite:* Students must be concurrently enrolled in, or have completed ADJU 100 with a grade of C or higher.  
*Note:* Students taking this course must submit and pass the Department of Justice fingerprint check – requires fees.  
*Class Hours:* 27 lab total  
The course meets curriculum and competency objectives for the firearms portion of the Commission on Peace Officer Standards and Training (P.O.S.T.) P.C. 832 training standard. Students will receive training on use and safety of firearms. They will also be required to fire a handgun and meet an accuracy standard established by P.O.S.T.

ADJU 103  
**COMMUNITY RESOURCES AND CRISIS INTERVENTION** – 2 Units (CR/NC Option) (F/S)

*Class Hours:* 36 lecture total  
The course will familiarize students with community health, education, and social service resources as related to identified social problems. In-depth instruction will be provided regarding crisis communication skills including active listening, community referrals, and problem-solving. Students will be able to communicate in crisis situations and identify appropriate referrals through a problem-solving perspective.

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"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.  
Subject to change. Check the current class schedule.
ADJU 106  SEXUAL ASSAULT AND DOMESTIC VIOLENCE EDUCATION & TRAINING (CR/NC Option) – 4 Units

Class Hours: 72 lecture total
This course covers the history, causes and dynamics of domestic violence and sexual assault. It will also cover existing laws and regulation in California with regards to sexual assault and domestic violence. Incident impact on individuals, family structure and the community will be discussed. The course is specifically designed to provide training to those who may become involved in crisis intervention and sexual assault and domestic violence victim advocacy, as well as those pursuing a career in law enforcement, education or social services.

ADJU 131  REGULAR BASIC COURSE MODULAR FORMAT LEVEL III ACADEMY – 4.5 Units (F/S)

Prerequisite: A grade of Credit in both ADJU 100 and ADJU 102
Class Hours: 78 lecture (includes 6 hours written testing and 4 hours remediation/retesting)/27 lab total
A course certified by the Commission on Peace Officer Standards and Training that meets the regular basic training requirements of a Modular Level III Regular Basic Academy. This is a regular basic course that includes training in law, patrol procedures, criminal investigation, arrest methods, juvenile procedures, vehicle operations, discretionary decision-making, community relations, and firearms. State mandates require that students successfully complete ADJU 100 and ADJU 102.

ADJU 132  REGULAR BASIC COURSE MODULAR FORMAT LEVEL II ACADEMY – 8 Units (F/S)

Limitation on Enrollment: Student must have successfully completed a P.O.S.T. certified Module 3 course within the last three years.
Class Hours: 90 lecture/162 lab total
A course certified by the Commission on Peace Officer Standards and Training that meets the regular basic training requirements of a Modular Level II Regular Basic Academy. This is an advanced course that includes training in law, patrol procedures, criminal investigation, arrest methods, juvenile procedures, vehicle operations, discretionary decision-making, community relations, and firearms. State mandates require that students successfully complete Modular Level III prior to enrolling in this course.

ADJU 197  SPECIAL TOPICS IN ADMINISTRATION OF JUSTICE – .5-3 Units (I)

This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge and new laws in Administration of Justice. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Administration of Justice majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

ADJU 312  HANDGUN SAFETY RECERTIFICATION – 0 Units (I)

Note: Course does not include range instruction.
Class Hours: 6 hours total
Designed for handgun owners who wish to remain current regarding the legal and moral aspects of handgun usage. State law now requires CCW renewal applicants to receive a minimum of four hours training every two years.

AGRICULTURE (AGRI)

AGRI 6  CAREER PLACEMENT – AGRICULTURE – 1 Unit (CR/NC Option) (S)

Note: Designed for students concurrently completing or who have completed the core course requirements in a vocational major.
Class Hours: 18 lecture total
This class will assist students in getting the best possible employment upon graduation. Students will learn interview techniques, will develop an employment portfolio, and will contact several prospective employers. Life goals will be developed complete with a plan of action. This class is required for all agriculture majors.

AGRI 10  LIVESTOCK SELECTION – 3 Units (CR/NC Option) (CAN# AG-AS 48) (I)

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. Field trips to area ranches may be taken.

AGRI 11  FEEDS AND FEEDING – 3 Units (CR/NC Option) (CAN# AG-AS 32) (S)

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.

AGRI 12  HORSEMANSHIP – 3 Units (CR/NC Option) (F)

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. A horse is recommended.

AGRI 13  HORSE HUSBANDRY – 3 Units (CR/NC Option) (CAN# AG-AS 16) (S)

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.
AGRI 14  WESTERN RIDING AND TRAINING *(formerly AGRI 111)* − 3 Units (CR/NC Option) (F)

**Class Hours:** 36 lecture/54 lab total

This course specializes in the many phases of Western riding and training. It is suited for intermediate level riders and those interested in a career. Subjects covered include basic training, groundwork, showing, trail riding, and more. It is essential in the Certificate Program as it better prepares the student to enter the horse business. Note: *This course may be repeated one time for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.*

AGRI 15  ARTIFICIAL INSEMINATION − 1 Unit (CR/NC Option) (I)

**Class Hours:** 9 lecture /27 lab total

Students will use the materials presented in class to identify one breeding synchronization program that will work in a typical beef operation. A presentation of the pros and cons will be given to the class in a discussion format.

AGRI 16  VETERINARY PRACTICES − 2 Units (CR/NC Option) (F)

**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.

AGRI 17  BEEF PRODUCTION − 2 Units (CR/NC Option) (CAN# AG-AS 8) (F)

**Note:** Field trips will be taken to various beef production operations in northern California and southern Oregon. These field trips are intended to expose students to every facet of beef production from cow/calf to packer.

**Class Hours:** 27 lecture/27 lab total

Beef production in the community, state, and nation, breeds and breeding, care and management, market grades and classes, judging and selection, principles and practices of purebred commercial and feedlot production, including housing, equipment and record-keeping. Field trips are a required part of the course.

AGRI 18  SWINE PRODUCTION *(formerly AGRI 18A)* − 2 Units (CR/NC Option) (CAN# AG-AS 28) (I)

**Class Hours:** 36 lecture/6 lab total

Course emphasizes the practices used in the production of commercial swine in California. General husbandry, selection, breeding, housing, and record keeping topics will be covered. Students will participate in lab activities conducted at the HRL-Holistic Resource Laboratory as an integral part of this course.

AGRI 19  PRINCIPLES OF ANIMAL SCIENCE - 3 Units (CR/NC Option) (CAN# AG-AS 6) (S)

**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.

AGRI 20  PLANT SCIENCE − 4 Units (CR/NC Option) (CAN# AG-PS 6) (S)

**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. Field trips to local areas will be included.

AGRI 21  HORSE MANAGEMENT *(formerly AGRI 115)* − 3 Units (CR/NC Option) (F)

**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.

AGRI 22  SHEEP PRODUCTION *(formerly AGRI 18B)* − 2 Units (CR/NC Option) (CAN# AG-AS 24) (I)

**Class Hours:** 27 lecture/27 lab total

A survey of the sheep industry in California covering breeds, breeding practices, feeding and marketing strategy. Students will participate in planned lab activities at the HRL-Holistic Resources Laboratory and should dress appropriately.

AGRI 25  IRRIGATION PRACTICES − 3 Units (CR/NC Option) (CAN# AG-PS 40) (I)

**Class Hours:** 36 lecture/54 lab total

This course involves the principles and practices of California water delivery. Basic topics of plant-soil-moisture relationships and water movement in the soil, water quality, water law, measurements of water, evaluation of irrigation methods, systems, wells and pumps will be included.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.

Subject to change. Check the current class schedule.
AGRI 50 AGRICULTURE RESOURCE MANAGEMENT – 3 Units (CR/NC Option) (S)
Class Hours: 36 lecture/54 lab total
A unique non-traditional land management class based on “sustainable,” “regenerative,” or “holistic” principles and practices. The total course will focus around the use of a “model” for making land management decisions for public and private lands. This class is appropriate for managing ranches and farms or for anyone interested in sustainable land management. Note: This course may be repeated one time for a total of two enrollments since course content varies and skills are enhanced by supervised repetition.

AGRI 51 AGRICULTURE RECORDS AND ANALYSIS – 3 Units (CR/NC Option) (CAN# AG-AB 28) (F)
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.

AGRI 54 RESOURCE ECONOMICS – 3 Units (CR/NC Option) (CAN# AG-AB 24) (F)
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 program solving. Student involvement in practical marketing, financing, promotions, business analysis, retailing, or some other practical economic problem will be required.

AGRI 56 AGRICULTURE PRACTICES, HOLISTIC RESOURCE CENTER (formerly AGRI 56NR) – 1-4 Units (CR/NC Option) (S)
Class Hours: 54 lab hours per unit
The practical application of skills needed to be successful in agriculture and natural resources will be learned by working in the Shasta College Holistic Resource Center and in the community. Required of all transfer agriculture, production agriculture, and ornamental horticulture majors. Note: This course may be repeated three times for a maximum of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.

AGRI 58 STUDENT ENTERPRISE PROJECTS – 1-4 Units (F/S)
Corequisite: Students must have a sponsoring instructor from the Center for Science, Industry and Natural Resources.
Limitation on Enrollment: Student must be concurrently enrolled in at least 9 units in the Agriculture or Natural Resources Area.
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.

AGRI 97 SPECIAL TOPICS IN AGRICULTURE – .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in agriculture. Subject matter varies each time the course is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

AGRI 98 SPECIAL TOPICS IN AGRICULTURE – LAB SKILLS – .5-2 Units (CR/NC Option) (I)
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics in a lab setting dealing with changing knowledge in agriculture. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

AGRI 110 HORSE TRAINING – 3 Units (CR/NC Option) (I)
Advisory: A grade of C or higher in AGRI 12
Class Hours: 36 lecture/54 lab total
A versatile approach to the basic principles involved in handling and training the young horse. Curriculum includes groundwork, trailering, starting a colt, and advancing the green horse. Problem solving will be discussed and worked on throughout the course. Horses are desired. Note: This course may be repeated one time for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

AGRI 112 HORSE SHOEING (formerly AGRI 112A) – 2 Units (CR/NC Option) (F/S)
Note: Students must provide their own horse for shoeing.
Class Hours: 27 lecture/27 lab total
Course offers the student an opportunity to study the anatomy and physiology of the horse’s foot, leg, and posture. Instruction will be given in trimming of horse’s feet and in the fitting and nailing of shoes.

AGRI 114 ENGLISH RIDING AND TRAINING (formerly AGRI 111B) – 3 Units (CR/NC Option) (I)
Note: Horses are not provided and helmets are required
Class Hours: 36 lecture/54 lab total
This course specializes in the many phases of English riding and training. It will bring together the material which is important to the student interested in horses as a career. This course helps to prepare the student to enter the horse business as a riding instructor, trainer, or manager. Horses are desirable. Note: This course may be repeated one time for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.
AGRI 115  SHOWING AND TRAINING THE HUNTER/JUMPER – 2 Units  (CR/NC Option)  (F)

Class Hours:  18 lecture/54 lab total  
Course designed to introduce the Intermediate or advanced rider to the proper selection, training and showing of the classic English hunter/jumper. Topics covered through labs and lecture will include training, basic dressage and flatwork, approaching jumper safe and properly, fitting the hunter/jumper and rider for shows, and organizational techniques to enhance shared experience.

AGRI 117  SHEEP SHEARING – 1 Unit  (CR/NC Option)  (S)

Note: Individual should be physically able to handle large animals. 
Class Hours:  9 lecture/27 lab total  
A course designed to introduce and improve sheep shearing techniques by the New Zealand method. An increasing level of proficiency will be expected in shearing, tagging, blade grinding, equipment maintenance, and wool handling. Students will shear 30-100 head of sheep. Students should be physically able to handle large animals.

AGRI 118  STOCK DOG TRAINING – 1 Unit  (CR/NC Option)  (S)

Class Hours:  9 lecture/27 lab total  
This course is designed to familiarize students with basic techniques of handling and training working stock dogs in preparation for ranch work and trailing. Demonstrations and hands-on involvement will include: working characteristics of different stock dog breeds, proper handler positioning, and basic obedience related to the working stock dog. Dogs present must have proof of valid rabies vaccination and be controlled on a leash. Note: Since skills are enhanced by supervised practice and repetition, this course may be repeated one time for a total of two enrollments.

AGRI 126  PESTICIDE TRAINING (formerly AGRI 126AD) – .5 Unit  (CR/NC Option)  (F)

Class Hours:  10 lecture total  
This course is designed to meet the continuing education requirement for pesticide applicators and pest control advisors. The focus of the course is on methods and calculations necessary to apply pesticides safely, accurately and efficiently and to look at alternative techniques being used and developed for management of plant pests.

AGRI 127  SELECTED TOPICS IN AGRICULTURE: HORSE SELECTION (formerly AGRI 128P) – .5 Unit  (CR/NC Only)  (I)

Class Hours:  9 lecture total  
Course will review the techniques involved in horse selection. Basic selection for confirmation, health, suitability to the buyer, and basic costs involved will also be covered.

AGRI 128  SELECTED TOPICS IN AGRICULTURE: HORSE HEALTH TIPS (form. AGRI 128W) – .5 Unit  (CR/NC Only)  (I)

Class Hours:  9 lecture total  
Course deals with the routine health of equine including vaccinations, parasite control, and common diseases. Emphasis is on preventive maintenance and necessary managerial practices needed to keep the equine athlete, broodmare or family horse in good health.

AGRI 159  FARM MANAGEMENT EXPERIENCE (formerly AGRI 159AD) – 4 Units  (CR/NC Option)  (F/S)

Class Hours:  18 lecture/162 lab total  
A practicum course dealing with the operation and management of the college farm and farm dormitory. Students are assigned specific farm responsibilities on a monthly basis. The subject of group living and group problem solving will also be discussed. Note: This class can be repeated up to three times for a total of four enrollments.

AGRI 197  SPECIAL TOPICS IN AGRICULTURE – .5-2 Units  (CR/NC Option)  (I)

Class Hours:  9-36 lecture total  
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in agriculture. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

ANATOMY    (ANAT)

ANAT 1  HUMAN ANATOMY – 5 Units  (CAN # BIOL 10)  (F/S)

Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher  
Note: May be taken concurrently with PHYS 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 is used as a teaching resource. May be taken concurrently with PHY 1.

“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year. Subject to change. Check the current class schedule.
ANTHROPOLOGY (ANTH)

ANTH 1 PHYSICAL ANTHROPOLOGY – 3 Units (CR/NC Option) (CAN# ANTH 2) (F/S)
Prerequisite: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Note: For Distance Education format, student must have access to the Internet.
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 learning format.

ANTH 2 CULTURAL ANTHROPOLOGY – 3 Units (CR/NC Option) (CAN# ANTH 4) (F/S)
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Note: For Distance Education format, student must have access to the Internet.
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 learning format.

ANTH 5 HUMANITY, CULTURE, AND ECOLOGY – 3 Units (CR/NC Option) (F/S)
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Note: When offered in a Distance Education format, student must have access to the Internet.
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 learning format.

ANTH 14 RELIGION, MYTH AND RITUAL – 3 Units (CR/NC Option) (I)
Advisory: A grade of C or higher in ENGL 280 or English Placement level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A cross-cultural study of the forms and functions of 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 learning format.

ANTH 25 CULTURE AND HISTORY OF THE NORTH AMERICAN INDIAN – 3 Units (CR/NC Option) (F/S)
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A course dealing with the history and culture of the North American Indian. Emphasis will be upon the origins, spread and diversification, and the development of Native American civilizations in North America. 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 learning format.

ARCHAEOLOGY (ARCH)

ARCH 3 PRINCIPLES OF ARCHAEOLOGY – 3 Units (CAN# ANTH 6) (F)
Class Hours: 54 lecture total
An introductory course to the study of world prehistory and historical archaeology through the analysis of archaeological method, theory, and regional developments. The course includes case study examination of the fundamental concepts of archaeology and the changing theoretical orientations of archaeology in the contemporary world.

ARCH 4 FIELD ARCHAEOLOGY – 3 Units (CR/NC Option) (S)
Class Hours: 18 lecture/108 lab total
An introductory course in the practical application of archaeological principles and methods. Students will become familiar with the basic techniques of scientific archaeological excavation and site survey, mapping, photographing, data recording, cataloging and preservation of archaeological specimens. Note: This course may be repeated three times for a total of four enrollments, since course content varies and skills are enhanced by repetition and practice.

ARCH 5 LABORATORY AND FIELD METHODS IN ARCHAEOLOGY (formerly ARCH 5AD) – .5-2 Units (S)
Class Hours: 27-108 lab total
This is a course that emphasizes both the field aspects of archaeology coupled with post-field laboratory analysis and data interpretation. Method and theory of both field survey, excavation and recording and post-field data processing and curation and subsequent interpretation and explanation will be the class focus. Some work may require overnight stays. Students will assume positions of crew chiefs, laboratory chiefs, mappers, camp organizers, etc. under the instructor’s direction. Students will participate in preliminary site analysis, interpretive projects, and cultural material processing. Note: This course may be repeated three times for a total of four enrollments, since course content varies and skills are enhanced by repetition and practice.
ART  (ART)

Recommended basic skills eligibility levels are as follows: ART 1, Art History classes, ART 35, ART 45 and ART 55 -- ENGL 190. All other classes -- ENGL 280 skills. Math recommendations are noted in course descriptions.

ART 1  INTRODUCTION TO ART – 3 Units  (F/S)
Class Hours: 54 lecture total
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, shade, texture, form and volume are examined by two- and three-dimensional examples. Required for Art Core Program and recommended for Humanities elective.

ART 2  HISTORY OF WESTERN ART THROUGH THE RENAISSANCE – 3 Units (CR/NC Option) (CAN# ART 2) (CAN# ART SEQ A) (F)
Class Hours: 54 lecture total
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, Gothic and Renaissance. (30,000 B.C. - 1500 A.D.) Required for the Art Core Program and recommended for Humanities elective.

ART 3  HISTORY OF WESTERN ART SINCE THE RENAISSANCE – 3 Units (CR/NC Option) (CAN# ART 4) (CAN# ART SEQ A) (S)
Class Hours: 54 lecture total
A historical survey course of the visual arts from the year 1500 through the 20th Century, with emphasis on painting, sculpture and architecture.

ART 4  ETHNIC ART OF THE WORLD – 3 Units  (I)
Class Hours: 54 lecture total
A survey course of the visual arts of Ethnic and Indian Cultures. Explored are the Eskimo, North West Coast, Pueblo, Apache, Navaho, Iroquois, Plains, Southeastern, California, Mexico, Peru, Africa, Polynesia, Melanesia, Micronesia, India, Japan, China, and Barbarians. Stress is given to the styles, motifs, symbols and meaning of the cultures by examining crafts, drawings, sculpture, woodcuts and paintings. This course designed for Humanities elective, recommended for Art Core Programs, and required for Art History Concentration.

ART 6  HISTORY OF MODERN ART – 3 Units  (I)
Class Hours: 54 lecture total
An in-depth study of visual expression since 1860, starting with pre-Impressionist stirring and tracing the development of modernism through significant art movements in the 20th Century.

ART 12  BEGINNING FORM, DESIGN AND COLOR (formerly ART 14A) – 3 Units (CR/NC Option) (CAN# ART 14) (F/S)
Class Hours: 36 lecture/72 lab total
A fundamental course in two-dimensional design and color theory with the study of basic design elements as they apply to form. Two-dimensional design includes balance, directional movements, structural analysis, texture and unity. Color theory includes color schemes, psychological use of color, and value and intensity concepts. Required for the Art Core Program.

ART 13  INTERMEDIATE FORM, DESIGN AND COLOR (formerly ART 14B) – 3 Units  (CR/NC Option) (S)
Prerequisite: A grade of C or higher in ART 12
Class Hours: 36 lecture/72 lab total
An interpretative course using two-dimensional form concepts and color theory with the application to three-dimensional form. The development of personal ideas and direction, the use of scale, surface effects, and new materials (synthetics). More concern is given to presentation, focus and consistency.

ART 15  THREE DIMENSIONAL DESIGN (formerly ART 15AB) – 3 Units  (CAN# ART 16) (I)
Class Hours: 36 lecture/72 lab total
A hands-on studio art course using the elements and principles of three-dimensional design in the creation of form and space relationships. This course provides students with the fundamental design and problem solving skills that apply to the fields of three-dimensional art, architecture, landscape, interior and industrial design. This course transfers to all California State Universities and California Universities. This course may be repeated once for a total of two enrollments since course content varies and skill development is enhanced with a successive enrollment.

ART 16  PENCIL RENDERING (formerly ART 16AB) – 2 Units  (I)
Class Hours: 18 lecture/54 lab total
A fundamental course to prepare pictorial presentation applicable to advertising, architectural and industrial design, landscapes and illustrations using mechanical perspective and rendering media. Course designed for Architectural majors and recommended for Art majors. Note: This course may be repeated once for a total of two enrollments since course content varies and skill development is enhanced with a successive enrollment.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year. Subject to change. Check the current class schedule.
ART 17  SHADES, SHADOWS, AND PERSPECTIVES (formerly ART 17AD) – 3 Units (CR/NC Option) (I)
Class Hours: 36 lecture/72 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 work. Note: This course may be repeated once for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ART 21A  FREEHAND DRAWING – 3 Units (CAN# ART 8) (CR/NC Option) (F/S)
Class Hours: 36 lecture/72 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  FREEHAND DRAWING – 3 Units (CR/NC Option) (S)
Prerequisite: A grade of C or higher in ART 21A
Class Hours: 36 lecture/72 lab total
A developmental course designed to expand upon the information and techniques learned in 21A. Greater concern for personal idea development, consistency and presentation techniques. More information given on paper and its manufacture, drawing materials and the techniques of developing a professional portfolio. A variety of materials will be used for this purpose.

ART 23  PEN, BRUSH AND INK (formerly ART 23AB) – 2 Units (I)
Class Hours: 18 lecture/54 lab total
A course in the techniques using landscape, free brush, and still life drawings. Course is designed for Architecture majors and recommended for Commercial Art, Craft Concentration Program. Note: This course may be repeated once for a total of two enrollments since course content varies and skill development is enhanced with a successive enrollment.

ART 26  BEGINNING WATERCOLOR PAINTING (formerly ART 26AB) – 3 Units (CR/NC Option) (F/S)
Class Hours: 36 lecture/72 lab total
An introductory course in watercolor painting methods as they apply to the visual arts. Methods covered include wet wash, wash, stroke and glaze overlays, with emphasis on creative interpretation and expression. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 27  INTERMEDIATE WATERCOLOR PAINTING (formerly ART 26CD) – 3 Units (CR/NC Option) (F/S)
Prerequisite: A grade of C or higher in two semesters of ART 26
Class Hours: 36 lecture/72 lab total
A developmental course designed to expand upon the information and techniques learned in ART 26. General attention will be given to personal idea development, consistency, presentation techniques and working with more independence. The student will be expected to increase quality and number of paintings completed during the semester. The student will also learn to develop a professional portfolio and to communicate professionally. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 29  BEGINNING PAINTING (formerly ART 25AB) - 3 Units (CAN# ART 10) (F/S)
Class Hours: 36 lecture/72 lab total
A creative course in the use of oil, polymer, and other synthetic media on canvas, hardboard, or metal. Application of these media and other media use in representation and abstract form. Course designed for Painting Concentration. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 30  INTERMEDIATE PAINTING (formerly ART 25CD) – 3 Units (F/S)
Prerequisite: A grade of C or higher in two semesters of ART 29
Class Hours: 36 lecture/72 lab total
A developmental course designed to expand upon the information and techniques learned in ART 29-Beginning Painting. General attention will be given to personal idea development, consistency, presentation techniques and working with more independence. The student will be expected to increase quality and number of paintings completed during the semester. The student will also learn to develop a professional portfolio and to communicate professionally. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 31  BEGINNING FIGURE DRAWING (formerly ART 22AB) – 3 Units (F/S)
Prerequisite: A grade of C or higher in ART 21A
Class Hours: 36 lecture/72 lab total
An introductory course in creative drawing of the nude human figure. Emphasis will be placed on anatomy, proportion, composition, and development of personal expression. Course required for Art Core Program. Note: This course may be repeated once for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ART 32  INTERMEDIATE FIGURE DRAWING (formerly ART 22CD) – 3 Units (F/S)
Prerequisite: A grade of C or higher in two semesters of ART 31
Class Hours: 36 lecture/72 lab total
A developmental course designed to expand on information and techniques learned in ART 31-Beginning Figure Drawing. Attention will be given to the development of a more personal interpretation of the figure, technique, consistency, presentation and the resolution and execution of ideas with greater independence. The student will produce and critically discuss increasingly sophisticated works which will become part of his/her professional portfolio. Note: This course may be repeated once for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.
ART 35  BEGINNING CERAMICS (formerly ART 35AB) – 3 Units (CR/NC Option) (CAN# ART 6) (F/S)
Class Hours: 36 lecture/72 lab total
An introductory course developing skills in hand-building with coils, slabs, and the use of the potter's wheel. The course includes glazing, decorative techniques, properties of clay and firing of ceramic forms. Note: This course may be repeated once for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ART 36  ADVANCED CERAMICS (formerly ART 35CD) – 3 Units (CR/NC Option) (I)
Prerequisite: A grade of C or higher in ART 35
Class Hours: 36 lecture/72 lab total
This is an advanced ceramics course emphasizing studio problems which involve the potter's wheel, construction of molds and advanced hand-building techniques. Note: This course may be repeated once for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ART 45  BEGINNING GLASS BLOWING (formerly ART 45AB) – 3 Units (CR/NC Option) (F/S)
Class Hours: 36 lecture/72 lab total
A course that develops skills and aesthetic awareness in hand blown glass. The course includes safety procedures, use of glass working tools, design and execution of simple hand blown forms, formulary of melting and recycling of glass. Course designed for Glass and Crafts Concentration Programs. All students in the glass blowing classes are required to sign up for 2 hours of studio work outside of regular class hours. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 46  INTERMEDIATE GLASS BLOWING (formerly ART 45CD) – 3 Units (CR/NC Option) (F/S)
Prerequisite: A grade of C or higher in ART 45
Class Hours: 36 lecture/72 lab total
A developmental course focusing 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. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 50  PRINTMAKING (formerly ART 50AD) – 3 Units (CR/NC Option) (CAN # ART 20) (F/S)
Class Hours: 36 lecture/72 lab total
An introductory course surveying printmaking processes as they apply to the visual arts. Studio experience will focus on one or two of the following techniques each semester: relief, intaglio, silk screen and/or lithographic printmaking. The creation of relief, silkscreen, intaglio and lithographic prints will be discussed and demonstrated. Note: This course may be repeated three times for a total of 4 enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ART 55  BEGINNING SCULPTURE (formerly ART 55AB) – 3 Units (CAN # ART 12) (I)
Class Hours: 36 lecture/72 lab total
A creative course in the sculpting of wood, plastics, plaster, and other materials. Application of these media are used in abstract and representational forms. Course designed for the Art Core program. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 56  INTERMEDIATE SCULPTURE (formerly ART 55CD) – 3 Units (I)
Prerequisite: A grade of C or higher in two semesters of ART 55
Class Hours: 36 lecture/72 lab total
A developmental course designed to expand upon the information and techniques learned in ART 55, Beginning Sculpture. General attention will be given to personal idea development, consistency, presentation, techniques and working with more independence. The student will be expected to increase quality and size of sculpture pieces during the semester. The student will also learn to develop a professional portfolio and to communicate professionally. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

ART 60A  BASIC PHOTOGRAPHY AND DARKROOM (form. ART 60AB) – 3 Units (CR/NC Option) (CAN # ART 18) (F/S)
Class Hours: 36 lecture/72 lab total
An introductory course presenting the origins and history of photography, camera and lens familiarization, exposure, metering, film development, printing procedures, print presentation, composition and standards of quality. Emphasis is placed on black and white negative and print quality along with content, composition and personal expression.

ART 61  BEGINNING CREATIVE PHOTOGRAPHY (formerly ART 61A) – 3 Units (CR/NC Option) (F/S)
Class Hours: 27 lecture/81 lab total
A course that concentrates on expressive and aesthetic aspects of photography in fine art. Emphasis will be placed on camera use, composition, film exposure and darkroom techniques to achieve artistic effect.

ART 62  INTERMEDIATE CREATIVE PHOTOGRAPHY (formerly ART 61BD) – 3 Units (CR/NC Option) (F)
Prerequisite: A grade of C or higher in ART 60A or a grade of C or higher in ART 61
Class Hours: 27 lecture/81 lab total
A continuation of techniques covered in ART 61. Emphasis will be on negative quality, the fine print and presentation. On-going study will concentrate on creative development of the personal idiom in creation of a portfolio, aesthetics and critical thought process. Note: This course may be repeated two times for a total of three enrollments since skills are enhanced by supervised repetition and practice.

“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year. Subject to change. Check the current class schedule.
ART 63  35MM SLIDE PHOTOGRAPHY – 3 Units  (CR/NC Option)  (I)
Prerequisite: A grade of C or higher in ART 60A or a grade of C or higher in ART 61
Note: May not transfer to four-year institution for Art majors
Class Hours: 45 lecture/27 lab total
A concentrated course in the application of concepts and techniques in the production of transparency materials for free
lance, commercial, and portrait applications. Subjects covered are photography color theory, types of slide films, processing slides, visual evaluation of slides, presentation and basic slide printing applications.

ART 80A  GRAPHIC DESIGN – 2 Units  (CR/NC Option)  (F/S)
Class Hours: 18 lecture/36 lab total
An introduction to the commercial art field with emphasis on production techniques for the graphic arts. Subjects covered
include rendering, typography, layout and design, printing processes, copy preparation, studio techniques and equipment.

ART 80B  GRAPHIC DESIGN – 2 Units  (CR/NC Option)  (F/S)
Prerequisite: A grade of C or higher in ART 80A
Class Hours: 18 lecture/36 lab total
A developmental course using techniques from ART 80A with emphasis on graphic design. Subjects covered are
designing with color, photography, literary illustration, advertising design, promotional graphics, instructional illustration, business practices, and portfolio development.

ART 97  SPECIAL STUDIO ART TOPICS – .5-2 Units  (CR/NC Option)  (I)
Class Hours: 27-108 lab total
This course is designed to give students studio-based instruction and experience in a variety of art processes not
regularly covered in other art classes. A different topic/process will be addressed each time the class is taught and will
be listed in the schedule of classes. Recommended for Art majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.

ART 98  SPECIAL ART TOPICS – .5-2 Units  (CR/NC Option)  (I)
Class Hours: 9-36 lecture total
This non-studio course is designed to give students an opportunity to explore a variety of topics dealing with changing
knowledge and contemporary and historical issues in the field of art. A different topic will be addressed each time the
class is taught and will be listed in the schedule of classes. Recommended for Art majors; open to anyone with an
interest in the topic. Note: This course may be repeated three times for a total of four enrollments.

THE 100 SERIES OF COURSES ARE SPECIFIC SUBJECT AREAS TAKEN FROM THE TRANSFER (1-98) COURSES AS
SHORT-TERM INTRODUCTION COURSES:

ART 110  MIXED MEDIA: WORKS ON PAPER – 2 Units  (CR/NC Option)  (I)
Class Hours: 18 lecture/54 lab total
This course selectively and aesthetically combines various media and techniques of drawing, painting, photo, printing
and collage into two-dimensional works. Underlying the instruction is a historical component which emphasizes modern
and contemporary art to broaden the students' interest and awareness of contemporary trends. Note: Since subject
matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.

ART 121  ILLUSTRATION (formerly ART 121W) – 2 Units  (CR/NC Option)  (I)
Class Hours: 18 lecture/ 54 lab total
Designed to develop a personal approach to the problems of pictorial elucidation and provides an understanding of the
use of visual media to illustrate verbal content. It develops a knowledge of the more common graphic media and of
design elements in relationship to illustration. Note: Since subject matter varies each time the course is taught, it may be
repeated three times for a maximum of four enrollments.

ART 122  PORTRAIT PAINTING (formerly ART 125W) – 2 Units  (CR/NC Option)  (I)
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. Note: Since subject matter varies each time the course is taught, it may be
repeated three times for a maximum of four enrollments.

ART 123  LANDSCAPE PAINTING (formerly ART 125X) – 2 Units  (CR/NC Option)  (I)
Class Hours: 18 lecture/54 lab total
A basic course to introduce the techniques of landscape painting, specifically the areas of pictorial materials, space,
simple perspective, composition, value, color, scale, texture, line, and the study of other landscape painters. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.

ART 124  INTRODUCTION TO PAINTING (formerly ART 125Y) – 2 Units  (CR/NC Option)  (I)
Class Hours: 18 lecture/54 lab total
Designed as an introductory segment to the practice and theory of painting. This course will focus upon those aspects of
pictorial organization employed in the formation of representational painting. Note: Since subject matter varies each
time the course is taught, it may be repeated three times for a maximum of four enrollments.
ART 125  INTRODUCTION TO WATERCOLOR (formerly ART 126W) – 2 Units (CR/NC Option) (I)
Class Hours: 18 lecture/54 lab total
A preliminary course in watercolor methods, such as wet wash, stroke and glaze overlays, with emphasis on creative interpretation of the environment. Note: This course may be repeated three times for a maximum of four enrollments since skills are enhanced by supervised repetition and practice.

ART 126  NATURE IN WATERCOLOR (formerly ART 126X) – 2 Units (CR/NC Option) (I)
Class Hours: 18 lecture/54 lab total
An extensive course in different watercolor methods, such as: wet wash, stroke, and glaze overlays, with emphasis on creative interpretation of subjects in nature. Note: This course may be repeated three times for a maximum of four enrollments since skills are enhanced by supervised repetition and practice.

ART 301  BEGINNING, INTERMEDIATE & ADV. DRAWING & PAINTING-MIXED MEDIA – 0 Units (I)
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 (I)
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 (CR/NC Option) (F/S)
Class Hours: 54 lecture total
A survey course designed to introduce the science of astronomy. This course covers aspects of archaeoastronomy, telescope optics, radio astronomy, prominent scientists, planets and moons, the sun, stars, stellar evolution and galaxies.

ASTR 5  COSMOLOGY – 1 Unit (CR/NC Option) (I)
Class Hours: 27 lecture total
A course designed to introduce past and current scientific evidence addressing the size, mass distribution and evolution of the universe. Elementary particles, fundamental forces, time, inflationary models, cosmic strings, bubble universes and the large-scale structure of the universe are included topics.

ASTR 6  EXTRATERRESTRIAL LIFE – 1 Unit (CR/NC Option) (I)
Class Hours: 18 lecture total
A course designed to introduce the strategies and techniques scientists utilize to search and identify extraterrestrial intelligence. Search strategies, methods of detection, probability of the presence of habitable planets, terraforming, message content, interstellar travel, intelligence, and methods of communication are discussed.

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 (F/S)
Class Hours: 36 lecture/72 lab total
Designed to cover the basic theory of electricity and magnetism, as well as areas of operation, testing and service of vehicle batteries, switches, relays, starters and starting systems, alternators, regulators, charging systems and light circuits. The course includes electrical theory, repair procedures, and ASE laboratory tasks. This course, along with AUTO 10, is designed to prepare students to become ASE certified in area A-6. Required for Automotive and Diesel Technology majors with emphasis on electrical systems.

AUTO 10  AUTOMOTIVE ELECTRONICS (formerly AUTO 110) – 3 Units (S)
Prerequisite: A grade of C or higher in AUTO 1
Class Hours: 36 lecture/72 lab total
This course is designed to establish an understanding of electronic theory and solid state technology as it applies to the automobile. The student will learn to read wiring schematics, calculate voltages, current flow, and resistances within parallel and series circuits, and to properly use related testing equipment used for diagnosis. This course includes electrical/electronic theory, repair procedures, and ASE laboratory tasks. This course, along with AUTO 1, is designed to prepare students to become ASE certified in area A-6.
AUTO 20 ENGINE PERFORMANCE – 4 Units (F)
Class Hours: 36 lecture/108 lab total
This course is designed to give students the understanding of the operation of automotive engines and related systems such as electrical, ignition and fuel delivery. The course will also provide students with entry level skills to diagnose, service and repair these systems using current industry tools and equipment. This course includes ASE laboratory tasks and is designed to prepare students to become ASE certified in area A-8.

AUTO 21 ADVANCED ENGINE PERFORMANCE – 3 Units (S)
Prerequisite: A grade of C or higher in AUTO 20
Class Hours: 36 lecture/72 lab total
This course is designed to continue the study of engine performance by including the emission control systems and computer controlled engine operation. The course will also provide students with entry level skills to diagnose, service and repair these systems using current industry tools and equipment. This course includes ASE laboratory tasks and, along with AUTO 20, is designed to prepare students to become ASE certified in areas A-8 and L-1.

AUTO 30 POLLUTION PREVENTION TRAINING FOR AUTOMOTIVE FACILITIES – 3 Units (CR/NC Option) (F/S)
Class Hours: 162 total hours (Internet Class)
This online course will instruct the student in proper ways to manage hazardous wastes generated by an automotive repair facility. The course is divided into three modules. Module 1 deals with the concepts of pollution prevention. Module 2 covers the waste streams inherent to automotive repair facilities. Module 3 requires each student to develop and perform an environmental audit of an automotive repair facility.

AUTO 94 WORKSITE LEARNING FOR AUTOMOTIVE TECHNOLOGY – 1-4 Units (F/S)
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

AUTO 130 AUTOMOTIVE STEERING AND SUSPENSION – 3 Units (F)
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 (S)
Prerequisite: A grade of C or higher in AUTO 130
Class Hours: 18 lecture/54 lab total
This course is designed to give students the entry level skills required to perform complete four-wheel alignments on modern automobiles and light trucks. The course includes theory of alignment principles and the operation of industry standard alignment equipment. This course, along with AUTO 130, is designed to prepare students to become ASE certified in area A-4.

AUTO 147 AUTOMOTIVE BRAKING SYSTEMS – 3 Units (S)
Class Hours: 36 lecture/72 lab total
This course is designed to provide the entry level skills needed to diagnose, service, and repair various braking systems found on domestic and import automobiles and light trucks. The course includes brake theory, repair procedures, and ASE laboratory tasks, and is designed to prepare students to become ASE certified in area A-5. Standard and power assist, drum and disc type systems and anti-lock braking systems are included in this course.

AUTO 150 AUTOMOTIVE INTERNAL COMBUSTION ENGINES THEORY – 3 Units (F/S)
Class Hours: 54 lecture total
This course is designed to cover the fundamentals of the modern internal combustion engine including theory, diagnosis, and overhaul procedures. Completion of this course along with AUTO 152, will prepare students to become certified in ASE areas A-1, M-1, M-2 and M-3.

AUTO 152 AUTOMOTIVE ENGINES LABORATORY – 3 Units (F/S)
Corequisite: Students must be concurrently enrolled in, or have completed AUTO 150 with a grade of C or higher
Class Hours: 162 lab total
This course is designed to provide entry level skills required to overhaul the modern internal combustion engine. ASE and AERA based tasks utilize hand and power tools and modern machining equipment. Completion of this course along with AUTO 150 will prepare students to become certified in ASE areas A-1, M-1, M-2 and M-3.
AUTO 161 MANUAL DRIVE TRAIN AND AXLES – 3 Units (F)

Class Hours: 36 lecture/72 lab total

A course designed to give a technical and working knowledge of manual drive trains and axles. Subject matter covered includes clutch diagnosis and repair, manual transmission diagnosis and repair, transaxle diagnosis and repair, drive (half) shaft and universal joint diagnosis and repair, rear axle diagnosis and repair, four-wheel drive component diagnosis and repair, theory of operation, repair procedures, and ASE laboratory tasks. This course is designed to prepare students to become ASE certified in area A-3.

AUTO 162 AUTOMATIC TRANSMISSIONS AND TRANSAXLES – 4 Units (S)

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 (S)

Class Hours: 36 lecture/54 lab total

This course is designed to give students a technical and working knowledge of automotive heating and air conditioning systems. Emphasis is placed on entry level skills necessary for diagnosing, servicing, and repairing modern automotive heating and air conditioning systems. The course includes theory of operation, repair procedures, and ASE laboratory tasks. This course is designed to prepare students to become ASE certified in area A-7.

AUTO 164 ELECTRONIC AND HIGH PERFORMANCE AUTOMATIC TRANSMISSIONS – 2 Units (F/S)

Class Hours: 18 lecture/54 lab total

A course designed to give a working knowledge of electronic automatic transmissions and transaxles. Subject matter covered includes a review of hydraulic and electronic principles, in-vehicle transmission/transaxle diagnosis and repair, and off-vehicle transmissions/transaxle repair. The course includes theory of operation, repair procedures, and use of diagnostic equipment necessary for problem solving on the modern electronic transmissions and transaxles. Also covered will be applications for automatic transmissions in the area of high performance vehicles.

AUTO 170 AUTOMOTIVE SERVICE PRINCIPLES – 2 Units (F)

Class Hours: 18 lecture/54 lab total

This course is designed as an introduction to the modern automobile with a focus on maintenance and service procedures. Emphasis will be placed on safety, consumer awareness, tool usage, and vehicle systems. Students will be required to provide a vehicle on which to perform the maintenance and service procedures and will need to have the necessary owners manual or service manual for that vehicle.

AUTO 172 BASIC AREA CLEAN AIR CAR COURSE – 3 Units (F)

Class Hours: 36 lecture/72 lab total

This course is designed to prepare students for entry into the Bureau of Automotive Repairs Smog Check Program. Successful completion of this course will allow any student to apply for an interim smog license. Before taking the ASE certification tests A6, A8 and L1, it is highly recommended that students complete the requirements for an Engine Performance Certificate. ASE Certification in areas A-6 and A-8 will be required by the Bureau for application for a Basic Smog License Exam and ASE Certification in areas A-6, A-8 and L-1 for application for the Advanced Smog License Exam.

AUTO 173 ENHANCED AREA CLEAN AIR CAR COURSE – 1 Unit (I)

Note: This course satisfies the BAR “20 Hour Update Course” requirement and the “BAR 97 Transition Class”

Class Hours: 18 lecture/10 lab total

This course is approved and required by the Bureau of Automotive Repair for technicians who wish to update their Basic Area Technician License to the Advanced Emission Specialist Technician License or technicians who wish to renew their Advanced Emission Specialist Technician License. The course covers detailed diagnostic and repair strategies for vehicles that fail BAR-97 Loaded Mode Emissions Inspection and satisfies the BAR “20 Hour Update Course” course requirement and the “BAR 97 Transition Class.”

AUTO 175 OBD II UPDATE TRAINING – 1 Unit (F/S)

Advisory: A student should have a good understanding of the OBD I operating system to be successful in this course.

Class Hours: 20 lecture total

This course is intended to give the student a general overview of the On-Board Diagnostics II (OBD II) operating system used on today’s vehicles. There are many facets to the OBD II operating system that go beyond the generic format described in the course textbooks. This course, and the accompanying final examination, are designed around the generic OBD II system, as mandated by the California Air Resources Board (CARB) and the United States Environmental Protection Agency (USEPA). This course will be taught using this generic format. The Bureau of Automotive Repair requires this course in order to obtain or retain a smog inspection license.

AUTO 180 AUTOMOTIVE MACHINIST I (formerly AUTO 180A) – 4 Units (F/S)

Prerequisite: A grade of C or higher in AUTO 150 and AUTO 152, or a grade of C or higher in DIES 164

Note: Basic hand tools required

Class Hours: 36 lecture/108 lab total

This course is designed to give the student instruction in the use of precision equipment required in the reconditioning of modern automotive engines. Students completing this course will have the manipulative skills and the knowledge of the various machine tools required to completely remanufacture automotive engines.

“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year.

Subject to change. Check the current class schedule.
AUTO 181  AUTOMOTIVE MACHINIST II (formerly AUTO 180B) – 4 Units (F/S)
Prerequisite: A grade of C or higher in AUTO 180
Note: Basic hand tools required
Class Hours: 36 lecture/108 lab total
This course will build on the skills obtained in AUTO 180, Automotive 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.

AUTO 197  SPECIAL TOPICS IN AUTOMOTIVE TECHNOLOGY – .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of Automotive Technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Automotive majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.

AVIATION MAINTENANCE TECHNOLOGY  (AVIA)

AVIA 101  AVIATION GROUND SCHOOL – 3 Units (CR/NC Only) (I)
Class Hours: 54 lecture total
Course is designed to prepare the student for qualification to take the Federal Aviation Administration private pilot's written exam.

AVIA 105  INSTRUMENT GROUND SCHOOL – 3 Units (CR/NC Only) (I)
Class Hours: 54 lecture total
This course will provide knowledge and data for the student to take the Federal Aviation Administration Instrument pilot's written exam.

BIOLOGICAL SCIENCES  (BIOL)

BIOL 1  PRINCIPLES OF BIOLOGY – 4 Units (CAN# BIOL 2) (BIOL SEQ A) (F/S)
Prerequisite: A grade of C or higher in CHEM 1A
Class Hours: 36 lecture/108 lab total
A biological science emphasizing molecular and cellular organization, energetics of respiration and photosynthesis, cell integration and development. General principles of heredity, evolution, speciation and ecology. Intended for majors in science.

BIOL 5  INTRODUCTION TO HUMAN BIOLOGY - 3 Units (F/S)
Class Hours: 54 lecture total
An introductory one semester course in human anatomy and physiology. Topics include the cells, tissues, and selected anatomy and physiology of all the human systems.

BIOL 6  INTRODUCTION TO HUMAN BIOLOGY LABORATORY – 1 Unit (F/S)
Corequisite: Student must be concurrently enrolled in, or have completed BIOL 5 with a grade of C or higher
Class Hours: 54 lab total
A laboratory course designed to complement BIOL 5. A one-semester human anatomy and physiology laboratory course. Exercises include microscopy, practical anatomy, physiology, and physiological instrumentation.

BIOL 10  GENERAL BIOLOGY – 4 Units (CR/NC Option) (F/S)
Class Hours: 54 lecture/54 lab total
This course is an introduction to the major concepts of modern biology. Topics covered include cell biology, heredity and nature of genes, evolution, diversity of life, and principles of ecology. Emphasis will be placed on those aspects of biology that are rapidly reshaping our culture. This is an approved general education course for non-life science majors who desire an introductory biology course with laboratory.

BIOL 11  DIVERSITY OF LIFE – 3 Units (CR/NC Option) (I)
Class Hours: 162 total hours
This course is a non-laboratory, computer-based life science course and is available only on the Internet. Topics include diversity of living things, interrelationships among living things, adaptations and evolution of living things, cell division and heredity, and the human organism. For more information on how to register and what is expected of the student refer to the title, DIVERSITY OF LIFE on the Homepage of Shasta College at http://www.shastacollege.edu.

BIOL 12  FIELD BIOLOGY – 3 Units (I)
Class Hours: 36 lecture/54 lab total
Plant and animal morphology, classification and ecological relationships examined through field and laboratory study. Principles of ecology illustrated in the context of biotic communities of Northern California.

BIOL 14  HEREDITY (formerly PHY 10) – 3 Units (F)
Class Hours: 54 lecture total
An introduction to the biological, medical and environmental basis of man's inheritance.
### BOTANY (BOT)

#### BIOL 15
**ENTOMOLOGY – 3 Units (I)**
- **Class Hours:** 36 lecture/54 lab total
- An introduction to the study of insects, their biology, anatomy, classification, and relation to human welfare.

#### BIOL 30
**NATURE PHOTOGRAPHY – 1 Unit (CR/NC Option) (I)**
- **Note:** Students must provide a camera, film, and processing
- **Class Hours:** 9 lecture/27 lab total
- Methods and techniques used in nature photography. Includes, micro, macro, wide angle, normal and telephotography.

#### BIOL 60
**BIOLOGY OF AGING – 3 Units (CR/NC Option) (I)**
- **Class Hours:** 54 lecture total
- This course examines processes and responses of the individual during the aging process. Emphasis will be on the difference between normal aging in the absence of disease and aging with disease. Topics include: Mental health, mental disease, sexuality, physical aspects of aging, acute illness, chronic illness, dying, and theories of aging.

### BUSINESS ADMINISTRATION (BUAD)

See Also: ACCT, MKTG, MIS, OAS, and REAL

#### BUAD 6
**BUSINESS LAW – 3 Units (CAN# BUS 8) (F/S)**
- **Class Hours:** 54 lecture total
- 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.

#### BUAD 8
**BUSINESS LAW – 3 Units (S)**
- **Class Hours:** 54 lecture total
- This course involves the various parameters and requirements of business organizations, security devices, bankruptcy with personal and intellectual property issues.

#### BUAD 10
**INTRODUCTION TO BUSINESS – 3 Units (F/S)**
- **Advisory:** A grade of C or higher in ENGL 280 or English Placement level 5 or higher
- **Class Hours:** 54 lecture total *(when offered in the Distance Education format, hours will total 162)*
- A survey course for both business and non-business majors covering the major field of business. Dynamics and complexities of the competitive business world including international business are explored through the study of topics including forms of business ownership, social responsibility and ethics, entrepreneurship, personnel, management and marketing concepts, securities market and other major aspects of business. 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 learning format.

#### BUAD 12
**INTERNATIONAL BUSINESS – 3 Units (CR/NC Option) (F/S)**
- **Advisory:** A grade of C or higher in BUAD 10, and a grade of C or higher in ENGL 280 or English Placement Level 5 or higher
- **Class Hours:** 54 lecture total *(when offered in the Distance Education format, hours will total 162)*
- An introduction to the essentials of international business and the environmental forces that impact on the managerial decision process. Gives an overview of global business with emphasis on cultural differences and global business concepts and issues influencing international business decision-making. Course examines the physical, financial, political, legal, competitive, labor, marketing, economic, and sociocultural constraints and opportunities of foreign market analysis and trade management. This course may be offered in a distance learning format.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.
BUAD 15  BUSINESS AND SOCIETY – 3 Units  (F/S)

Class Hours: 54 lecture total
The purpose of this course is to acquaint the student with the American enterprise system, impart consumer knowledge, become aware of business issues and their effect on merchants as well as customers, understand the consumer's role in relation to the marketplace, explore current business and ethical issues, and develop an appreciation for the complexity of business decision making.

BUAD 40  ENTREPRENEURSHIP AND SMALL BUSINESS OPERATIONS – 3 Units  (I)

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 development of a sound business plan that includes a financial, management, and marketing analysis. This course may be offered in a distance learning format.

BUAD 41  LEADERSHIP & SUPERVISION  (formerly Personnel Management) – 3 Units  (CR/NC Option)  (F)

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 learning format.

BUAD 42  FINANCING A SMALL BUSINESS – 3 Units  (CR/NC Option)  (I)

Class Hours: 54 lecture total  (when offered in the Distance Education format, hours will total 162)
A course designed to help the student gain an understanding of 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 learning format.

BUAD 44  INVESTMENTS  (formerly FIN 44) – 3 Units  (CR/NC Option)  (I)

Class Hours: 54 lecture total  (when offered in the Distance Education format, hours will total 162)
Course designed to help the student gain an understanding of stocks, bonds, and other securities. Students will be encouraged to develop their own investment philosophy based on an understanding of the securities market and methods of analyzing that market. Recommended for students wanting an understanding of how businesses raise capital in the securities market. The student will develop a hypothetical personal investment portfolio, which will be tracked with the assistance of a web-based monitoring system. This course may be offered in a distance learning format.

BUAD 45  HUMAN RELATIONS ON THE JOB – 3 Units  (F/S)

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 learning format.

BUAD 66  BUSINESS COMMUNICATIONS – 3 Units  (F/S)

Prerequisite: A grade of C or higher in BUAD 166 or English Placement Level 6 or higher
Note: Student must submit all assignments in keyboarded (not handwritten) format.
Class Hours: 54 lecture total  (when offered in the Distance Education format, hours will total 162)
This course provides implementation of letter-writing principles and techniques through expository and argumentative writing. Additionally, the writing of employment portfolio, business letters and vocational survey (team project) is required. Application of electronic communication (Netiquette, E-mail 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 satisfied the A.A. General Education Requirement for English. This course may be offered in a distance learning format.

BUAD 71  INTRODUCTION TO e-COMMERCE – 1 Unit  (CR/NC Option)  (I)

Class Hours: 18 lecture total
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.

BUAD 72  e-COMMERCE MARKETING – 1 Unit  (CR/NC Option)  (I)

Class Hours: 18 lecture total
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.
**BUAD 73** WEB DESIGN CONCEPTS FOR e-COMMERCE – 1 Unit (CR/NC Option) (I)

**Class Hours:** 18 lecture total

This course is a conceptual approach to basic principles/concepts of web design for e-commerce applications. Topics include analysis of established e-commerce web sites; Internet principles and access; storefront services; software options; advertising options; search engines and directories; monitoring customers; understanding forms; databases; shopping carts; and payment processing. This is a CONCEPTUAL course and does not involve the hands-on development of web sites.

**BUAD 80** PRINCIPLES OF CUSTOMER SERVICE – 3 Units (I)

**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 to the importance of meeting the needs of customers in a service economy. Students will gain insight into employer and customer expectation 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. Topics will also include communicating with customers, developing a positive attitude, handling complaints and sales skills. This course may be offered in a distance learning format.

**BUAD 81** STRESS MANAGEMENT IN THE WORKPLACE – .5 Unit (CR/NC Only) (I)

**Class Hours:** 9 lecture total

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.

**BUAD 82** MANAGING ORGANIZATION CHANGE – .5 Unit (Credit/No Credit Only) (I)

**Class Hours:** 9 lecture total

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.

**BUAD 83** CONFLICT RESOLUTION – .5 Unit (Credit/No Credit Only) (I)

**Class Hours:** 9 lecture total

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.

**BUAD 84** ATTITUDE IN THE WORKPLACE – .5 Unit (Credit/No Credit Only) (I)

**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 learning format.

**BUAD 85** CUSTOMER SERVICE IN THE WORKPLACE – .5 Unit (CR/NC Only) (I)

**Class Hours:** 9 lecture total

This course is designed to provide the student with certain key skills and attitudes in order to effectively meet the needs of 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.

**BUAD 86** DECISION MAKING AND PROBLEM SOLVING – .5 Unit (CR/NC Only) (I)

**Class Hours:** 9 lecture total

This course is designed to introduce the student to decision making and problem solving as a supervisor.

**BUAD 87** TEAM BUILDING – .5 Unit (CR/NC Only) (I)

**Class Hours:** 9 lecture total

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.

**BUAD 88** COMMUNICATING WITH PEOPLE – .5 Unit (CR/NC Only) (I)

**Class Hours:** 9 lecture total

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.

**BUAD 89** TIME MANAGEMENT – .5 Unit (Credit/No Credit Only) (I)

**Class Hours:** 9 lecture total

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.

“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year. Subject to change. Check the current class schedule.
BUAD 90  FOUNDATION ESSENTIALS: VALUES AND ETHICS—.5 Unit (Credit/No Credit Only) (I)
Class Hours: 9 lecture total
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.

BUAD 91  PRINCIPLES OF MANAGEMENT – 3 Units (F)
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 learning format.

BUAD 92  PROJECT MANAGEMENT: PRINCIPLES AND PRACTICES – 3 Units (CR/NC Option) (I)
Advisory: This is a specialized business course recommended for students with business experience.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Project Management: Principles and Practices is designed to familiarize the student with management techniques specific to project management environments. These environments typically include construction industries, hi-tech organizations, and other businesses and ventures dealing with predetermined time, dollar, and performance parameters.
The course covers nine areas identified by the Project Management Institute. These include: (1) project integration management; (2) project scope management; (3) project time management; (4) project cost management; (5) project quality management; (6) project human resource management; (7) project communication management; (8) project risk management; (9) project procurement management. This course may be offered in a distance learning format.

BUAD 94  BUSINESS WORKSITE LEARNING – 1-4 Units
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

BUAD 97  SPECIAL TOPICS IN BUSINESS ADMINISTRATION - .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in business administration. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

BUAD 98  SPECIAL LAB TOPICS IN BUSINESS ADMINISTRATION – .5-2 Units (CR/NC Option) (I)
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in business administration. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

BUAD 106  BUSINESS MATHEMATICS – 3 Units (CR/NC Option) (F/S)
Prerequisite: A grade of C or higher in MATH 240 or Math Placement Level 2 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A required course in several business occupational majors and suggested elective in others. Student entering this class should have a strong foundation of basic arithmetic skills of adding, subtracting, multiplying, and dividing of whole numbers, fractions, decimals, and percentage values. The class consists of applications of these skills to such business problems as markup, simple, discount, and compound interests, trade and cash discounts, insurance, installment buying, and depreciation. Waiver: Under certain circumstances, this course may be waived for some A.A. degrees or certificate requirements by substituting MATH 102 or higher math course. This course may be offered in a distance learning format.

BUAD 120  STARTING A SMALL BUSINESS – THE ENTREPRENEUR – 1 Unit (CR/NC Option) (F/S)
Class Hours: 18 lecture total
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.
**BUAD 166** BUSINESS ENGLISH - 3 Units (F/S)
*Prerequisite:* 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. A required course for many majors and certificate programs and an alternative requirement or suggested elective in others. Class also satisfies the A.A. General Education requirement. This course may be offered in a distance learning format.

**BUAD 378** TUTORING WORKSHOP – 0 Units (F/S)
*Class Hours:* TBA

Individualized workshops developed for students having difficulty in the area of Business and Computer Science. Students will receive individualized tutoring to help them overcome difficulties in classroom assignments.

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**CASINO MANAGEMENT** (CAS)

**CAS 10** INTRODUCTION TO CASINO OPERATIONS – 2 Units (CR/NC Option) (F)
*Class Hours:* 27 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)

An orientation into the various aspects of the casino and gaming industry. Includes a study of legal gaming jurisdictions, an introduction to typical casino games, basic playing strategies and money management techniques, customer service, establishment of casino credit, comps, and casino junkets. This course also focuses on the history of casinos and on modern-day trends, career opportunities, and recent innovations in the casino industry. This course may be offered in a distance learning format.

**CAS 20** THE HISTORY OF GAMING/NATIVE AMERICAN GAMING – 1 Unit (CR/NC Option) (S)
*Class Hours:* 18 lecture total (when offered in the Distance Education format, hours will total 54)

This course reviews the historical landmarks in the casino and gaming industry within the United States. It focuses primarily on the legalization of gaming in Nevada and California. This course will also examine the economic and employment impacts of gaming on local jurisdictions. Students will also review the current and future developments of gaming. This course may be offered in a distance learning format.

**CAS 30** CASINO SURVEILLANCE - 3 Units (CR/NC Option) (F)
*Class Hours:* 54 lecture total (when offered in the Distance Education format, hours will total 162)

A review of the fundamentals of casino games including table games, slots, race and sports, and keno. The students become familiar with game protection techniques, rules of evidence, and regulations governing the casino floor. Reporting styles and prosecution procedures will also be addressed. This course may be offered in a distance learning format.

**CAS 40** CASINO MANAGEMENT AND OPERATIONS – 3 Units (CR/NC Option) (S)
*Prerequisite:* A grade of C or higher in MATH 240 or Math Placement Level 2 or higher
*Advisory:* A grade of C or higher in CAS 10
*Class Hours:* 54 lecture total (when offered in the Distance Education format, hours will total 162)

A thorough examination of the internal management practices used by today’s successful casino. Course will focus on gaming regulations and controls, casino marketing, table game management and protection, slot and gaming device management, surveillance procedures, casino staffing, and casino layout and design. Students will also be trained in the methods by which cheating can occur in each of the casino games covered. A glimpse into the future outlook of gaming and career paths in the casino industry shall be included as well. This course may be offered in a distance learning format.

**CAS 50** CASINO MARKETING/CONSUMER BEHAVIOR – 3 Units (CR/NC Option) (S)
*Class Hours:* 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course will discuss concept and marketing strategies behind gaming products and services. This course will evaluate the need for entertainment, VIP parties, design, décor, and “hook” strategies used by casinos to lure customers. Player retention strategies and service qualities will also be included. This course shall also explore the numerous areas of consumer behavior in the gaming industry. Factors of motivation, greed, and the quest for gratification shall be discussed. An insight into pathological gambling as a prelude to a psychological and medical disease will be addressed. This course may be offered in a distance learning format.

**CAS 94** CASINO MANAGEMENT WORKSITE LEARNING – 1-4 Units (F/S)

*Limitation on Enrollment:* To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.

*Note:* During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
*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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year.

Subject to change. Check the current class schedule.
### CHEMISTRY (CHEM)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1A</td>
<td>GENERAL CHEMISTRY -- 5 Units (CR/NC Option) (CAN# CHEM 2) (CHEM SEQ A) (F/S)</td>
<td>5</td>
<td>A grade of C or higher in CHEM 16 or CHEM 2A, or a score of 20 or higher on the California Chemistry Diagnostic test; and a grade of C or higher in MATH 102 or Math Placement Level 4 or higher. (If you have completed one year of high school chemistry with a grade of C or higher, you will be eligible to enroll in this course once you have seen a counselor.) Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.</td>
<td>Class Hours: 54 lecture/108 lab total. An introduction to chemical kinetics, nuclear chemistry and transition metals, along with continued, in-depth study of thermodynamics, electrochemistry, equilibrium, and acid-base and solution chemistry.</td>
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<tr>
<td>CHEM 1B</td>
<td>GENERAL CHEMISTRY -- 5 Units (CAN# CHEM 4) (CHEM SEQ A) (CR/NC Option) (F/S)</td>
<td>5</td>
<td>A grade of C or higher in CHEM 1A</td>
<td>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.</td>
</tr>
<tr>
<td>CHEM 2A</td>
<td>INTRODUCTION TO CHEMISTRY -- 5 Units (CAN# CHEM 6) (CHEM SEQ A) (F/S)</td>
<td>5</td>
<td>A grade of C or higher in MATH 101 or Math Placement Level 3 or higher</td>
<td>Note: The lecture/discussion portion of this course may be offered as distance education. Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Class Hours: 54 lecture/18 discussion/54 lab total (when offered in the Distance Education format, lecture hours will total 216) This course is a survey of inorganic chemistry and some organic chemistry suitable for agriculture and nursing students. The basic fundamentals of the metric system, chemical nomenclature, atomic and molecular structure, chemical reactions, energy changes, states of matter, solutions, chemical equilibria and kinetics, and organic functional groups are presented. The quantitative nature of chemistry is developed by introduction of the Avogadro’s number and the mole and continuing with stoichiometry, gas law, solution concentrations and pH calculations. The lecture/discussion portion of this course may be offered in a distance learning format.</td>
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<tr>
<td>CHEM 2B</td>
<td>INTRODUCTION TO ORGANIC AND BIOCHEMISTRY -- 5 Units (CAN # CHEM 8) (CHEM# CHEM SEQ B) (CR/NC Option) (S)</td>
<td>5</td>
<td>A grade of C or higher in CHEM 2A or CHEM 1A</td>
<td>Note: The lecture/discussion portion of this course may be offered as distance education. 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) An introduction to 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 learning format.</td>
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<tr>
<td>CHEM 6</td>
<td>INTRODUCTORY CHEMISTRY APPLIED TO THE ENVIRONMENT -- 4 Units (I)</td>
<td>4</td>
<td>A grade of C or higher in MATH 101, or Math Placement Level 3 or higher</td>
<td>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.</td>
</tr>
</tbody>
</table>
CHEM 10  CHEMISTRY FOR THE LIBERAL ARTS – 3 Units (CR/NC Option) (F/S)

**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 54)

A non-mathematical introduction to the major concepts of chemistry with attention to their relevance to practical and societal problems. This course is intended for 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. This course may be offered in a distance learning format. This course will meet the general education requirement for a laboratory science if the laboratory course is taken with CHEM 11.

CHEM 11  CHEMISTRY LABORATORY FOR THE LIBERAL ARTS – 1 Unit (CR/NC Option) (F/S)

**Corequisite:** Students must be concurrently enrolled in, or have completed CHEM 10 with a grade of C or higher

**Note:** CHEM 10 taken with CHEM 11 meets GE requirement in science. Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.

**Class Hours:** 54 lab total (when offered in the Distance Education format, hours will total 54)

Laboratory experiments and demonstrations, almost entirely non-mathematical, covering the basic concepts of the lecture course, CHEM 10. The laboratory is designed to help students learn how to use various chemicals around us, safely and effectively. This course may include field trips. This course may be offered in a distance learning format.

CHEM 16  CHEMICAL PROBLEM-SOLVING – 3 Units (CR/NC Option) (F/S/I)

**Advisory:** A grade of C or higher in MATH 101 or Math Placement Level 3 or higher

**Note:** Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.

**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 54)

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 learning format.

CHEM 26  FUNDAMENTALS OF GENERAL, ORGANIC, AND BIOCHEMISTRY – 4 Units (F/S/I)

**Class Hours:** 72 lecture total (when offered in the Distance Education format, hours will total 72)

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 and BSN program and is also suitable for AA degree programs and non-science transfer students. This course may be offered in a distance learning format.

CHEM 70  ORGANIC CHEMISTRY – 3 Units (F)

**Prerequisite:** A grade of C or higher in CHEM 1B.

**Note:** CHEM 70A should be taken concurrently with CHEM 70 for science majors for transfer

**Class Hours:** 54 lecture total

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.

CHEM 70A  ORGANIC CHEMISTRY LABORATORY - 2 Units (F)

**Prerequisite:** A grade of C or higher in CHEM 1B

**Corequisite:** Students must be concurrently enrolled in, or have completed CHEM 70 with a grade of C or higher

**Note:** Chemistry majors are required to take CHEM 70A concurrently with CHEM 70. Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.

**Class Hours:** 108 lab total

Theory and application of organic chemistry laboratory techniques.

CHEM 71  ORGANIC CHEMISTRY – 3 Units (S)

**Prerequisite:** A grade of C or higher in CHEM 70

**Note:** CHEM 71A should be taken concurrently with CHEM 71 for science majors for transfer

**Class Hours:** 54 lecture total

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, Thiois and Sulfides, Aldehydes and Ketones, Carboxylic Acids, Carboxylic Acids, Carboxylic Acid Derivatives and Nucleophilic Acyl substitution, Carbonyl alpha-substitution Reactions Carbonyl Condensation, Amines, Carbohydrates, Amino Acids, Peptides and Proteins, Lipids. This course completes a two-semester sequence for science majors. CHEM 71A, laboratory course, should be taken concurrently for science majors. Check school of transfer for their requirements.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.

Subject to change. Check the current class schedule.
CHEM 97  SPECIAL TOPICS IN CHEMISTRY – .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in chemistry. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

CHEM 98  SPECIAL TOPICS IN CHEMISTRY – LAB SKILLS – .5-2 Units (CR/NC Option) (I)
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics in a lab setting dealing with changing knowledge in chemistry. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

COMMUNICATIONS (COM)

COM 20  INTRODUCTION TO MULTI-MEDIA – 3 Units (CR/NC Option) (F)
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 (CR/NC Option) (S)
Class Hours: 54 lecture total
This course will acquaint you with the process of designing and producing effective multi-media presentations. You will work individually and as a part of a creative team. The focus is on identifying and analyzing audiences; designing, adapting, and organizing information for multi-media presentations. Software such as Final Cut Pro, Adobe Premier and Macromedia Director are complex tools that will be explored. The class also will explore basic planning strategies, production techniques, materials and equipment involved in a computer multimedia production. Students will be expected to complete at least two projects suitable for a portfolio.

COM 22  BEGINNING TV PRODUCTION – 3 Units (F/S)
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 (CR/NC Option) (F)
Class Hours: 36 lecture/54 lab total
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.

COM 31  INTRODUCTION TO DIGITAL AUDIO – 3 Units (CR/NC Option) (S)
Class Hours: 36 lecture/54 lab total
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.

COM 97  SPECIAL TOPICS IN COMMUNICATION DESIGN – .5-3 Units (CR/NC Option)
Class Hours: 27-162 lab
This course is designed to give students experiential instruction in a variety of communication settings. It focuses on the design, implementation, management, and coordination of the technical elements of production of communication design projects. Students will design multimedia projects, manipulate digital and analog sounds and images, and develop and produce television, radio, or internet content. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. This course may be repeated three times for a total of four enrollments.
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<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
<th>Notes</th>
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<tbody>
<tr>
<td>CIS 1</td>
<td>COMPUTER LITERACY WORKSHOP (formerly MIS 19)</td>
<td>3 units</td>
<td>(F/S)</td>
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<tr>
<td>Note: Class will require outside time using a computer with appropriate software. Some access is allowed on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to (and a working knowledge of) the Internet, plus access to the software Windows 98 (or better) and Office 2000 Professional (or better).</td>
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<tr>
<td>Class Hours: 45 lecture/27 lab total</td>
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<td>This course is designed to help students achieve a degree of computer literacy by presenting a complete discussion of computers and data-processing – hardware, software, history, programming languages, computer ethics, and cultural implications. Simulation provides a broad knowledge of computer components and usage. Practical hands-on applications of system software and productivity software increase literacy and competency in the rapidly changing world of computers. This course may be offered in a distance learning format.</td>
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<tr>
<td>CIS 2</td>
<td>INTRODUCTION TO COMPUTER SCIENCE (formerly MIS 20)</td>
<td>4 units</td>
<td>(CAN # CSCI 2) (F/S)</td>
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<td>Class Hours: 72 lecture total</td>
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<td>This course is designed as an introduction to business data processing for those students planning on a career in the general field of computer science. Computer history, hardware, software, processing, systems, programming languages, storage devices, careers, and impact on society will be explored to enable the student to become computer literate. Common business applications are used to examine a wide range of methods for processing data in the interactive mode. The student will design, code, and debug programs in languages such as Machine, Assembler, Java, C and/or BASIC as assigned.</td>
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<tr>
<td>CIS 3</td>
<td>SYSTEMS ANALYSIS METHODS (formerly MIS 29)</td>
<td>3 units</td>
<td>(S)</td>
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<td>Class Hours: 54 lecture total</td>
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<td>Information Systems Analysis with emphasis on current system documentation through the use of both classical and structured tools/techniques for describing process flows, data structures, file designs, input and output designs and programs specifications. Discussion of information gathering and reporting activities and of the transition from analysis to design. This course specifically specifies requirements for the CIS-4 course in the DPMA Education Foundation Model Curriculum for Undergraduate Computer Information Systems Education. This course may be offered in a distance learning format.</td>
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<tr>
<td>CIS 4</td>
<td>BUSINESS DATA COMMUNICATIONS (formerly MIS 30)</td>
<td>3 units</td>
<td>(F)</td>
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<td>Advisory: A grade of C or higher in CIS 1 or CIS 2 or equivalent computer experience recommended for success.</td>
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<tr>
<td>Class Hours: 54 lecture total</td>
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<tr>
<td>Covers the concepts, vocabulary, design issues, and techniques currently used in the area of data communications. Topics include history and evolution of the Internet, transmission media, interconnection topology, control methods, protocols, types of nodes, network interfaces, bridges, gateways, performance considerations, maintenance considerations, and security considerations. This course may be offered in a distance learning format.</td>
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<tr>
<td>CIS 5</td>
<td>HELP DESK – LEVEL 1 (formerly MIS 90)</td>
<td>3 units</td>
<td>(CR/NC Option) (I)</td>
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<tr>
<td>Class Hours: 54 lecture total</td>
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<td>This course is designed to educate students as computer support specialists in order to compete for positions such as help desk or technical support technicians. Students will examine the different types of help desks, the available help desk career paths, and the kinds of knowledge, skills, and abilities they need to be successful in a help desk environment. They will gain an understanding of how people, processes, technology and information affect the typical help desk structure and how outstanding customer service is the bottom line.</td>
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<tr>
<td>CIS 10</td>
<td>EXCEL FOR WINDOWS – I (formerly MIS 73)</td>
<td>1 unit</td>
<td>(CR/NC Option) (F/S)</td>
</tr>
<tr>
<td>Advisory: Ability to type 25 wpm</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Note: Class will require outside time using a computer with appropriate software. Some access is allowed on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.</td>
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<tr>
<td>Class Hours: 18 lecture/9 lab total</td>
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<tr>
<td>This is an introductory course that introduces the concepts, principles, and uses of the EXCEL spreadsheet through multimedia lecture/demonstration/discussion on an IBM compatible microcomputer. Instruction will include use of the Windows environment; creating, editing, formatting, and printing a worksheet; charts/graphs development; and formulas/functions using relative, absolute and mixed cell reference. This course may be offered in a distance learning format.</td>
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</tr>
<tr>
<td>CIS 11</td>
<td>EXCEL FOR WINDOWS – II (formerly MIS 74)</td>
<td>1 unit</td>
<td>(CR/NC Option) (F/S)</td>
</tr>
<tr>
<td>Advisory: A grade of C or higher in CIS 10. Ability to type 25 wpm</td>
<td></td>
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</tr>
<tr>
<td>Note: Class will require outside time using a computer with appropriate software. Some access is allowed on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.</td>
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<td></td>
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<tr>
<td>Class Hours: 18 lecture/9 lab total</td>
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<tr>
<td>Designed to expand and improve word processing skills through multi-media lecture/demonstration/discussion on an IBM compatible microcomputer. Instruction will include workbook management, control, and protection; utilizing the worksheet as a database, customizing charts/graphs; exchanging data between software programs; and using EXCEL to collaborate over the Internet. This course provides preparation for Microsoft Office User Specialist (MOUS) Excel Certification. This course may be offered in a distance learning format.</td>
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</tr>
</tbody>
</table>

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year. Subject to change. Check the current class schedule.
CIS 12  EXCEL FOR WINDOWS – III (formerly MIS 75) – 1 Unit (CR/NC Option) (F/S)

Advisory: A grade of C or higher in CIS 11. Ability to type 25 words per minute.

Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.

Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hour will total 63)

Designed to expand and improve worksheet 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 file management and worksheet concepts; macros; filtering, subtotalling, and validating data lists; worksheets analysis tools – input areas, Scenario Summary, data tables, Goal Seek, Solver and Pivot Tables; customizing and controlling the worksheet; workgroups; and VBA (Visual Basic Applications). This course provides preparation for Microsoft Office User Specialist (MOUS) Excel Certification, Expert. This course may be offered in a distance learning format.

CIS 20  ACCESS FOR WINDOWS – I (formerly MIS 53) - 1 Unit (CR/NC Option) (F/S)

Prerequisite: A grade of C or higher in CIS 20

Advisory: Ability to type 25 wpm

Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.

Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hour will total 63)

This course introduces the concepts, principles, and creation of relational databases through multi-media lecture/demonstration/discussion using Microsoft ACCESS on an IBM compatible microcomputer. Topics to be covered will include: the principles and elements of the relational database; design of tables and data entry; maintenance of the database 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 may be taught in a distance learning format.

CIS 21  ACCESS FOR WINDOWS – II (formerly MIS 54) - 1 Unit (CR/NC Option) (F/S)

Prerequisite: A grade of C or higher in CIS 21

Advisory: Ability to type 25 wpm

Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.

Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hour will total 63)

Designed to expand and improve database management skills through multi-media lecture/demonstration/discussion on an IBM compatible microcomputer. Instruction will include a review of database concepts; queries involving linked tables, logical operators, calculated fields, and crosstab and update queries; presentation of data through forms and reports (including field calculations and graphics); creating hyperlinks among programs and web pages; and advanced queries. This course provides preparation for Microsoft Office User Specialist (MOUS) Access Certification. This course may be offered in a distance learning format.

CIS 22  ACCESS FOR WINDOWS – III (formerly MIS 55) – 1 Unit (CR/NC Option) (F/S)

Prerequisite: A grade of C or higher in CIS 22

Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.

Class Hours: 18 lecture/9 lab total (when offered in the Distance Education format, hour will total 63)

Designed to expand and improve database management skills to a more advanced level of proficiency through multi-media lecture/demonstration/discussion on an IBM compatible microcomputer. Instruction will include a review of database concepts; management, maintenance, and protection of the database and its objects; development and use of macros and modules; customizing forms and reports; providing user-friendly access; and analyzing database performance. This course provides preparation for Microsoft Office User Specialist (MOUS) Access Certification, Expert. This course may be offered in a distance learning format.

CIS 31  CISCO NETWORKING CCNA 1 – NETWORKING FUNDAMENTALS (formerly MIS 32/MIS 1) – 3 Units  (F)

Advisory: A grade of C or higher in CIS 2

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

This course is the first in a 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 region. Instructional materials developed by Cisco Systems are utilized for the course. The course covers the fundamentals of computer networking. Specific topics will include: OSI Model, industry standards, networking protocols, networking components and media, IP addressing, subnet masks, network topologies, LAN design, cables and jacks, power and noise, network installation, network management and troubleshooting, introduction to routing and routed protocols. This course may be offered in a distance learning format.

CIS 32  CISCO NETWORKING CCNA 2 – ROUTING TECHNOLOGY (formerly MIS 32/MIS 2) – 3 Units  (F)

Prerequisite: A grade of C or higher in CIS 31

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

This course is the second in a 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 region. Instructional materials developed by Cisco Systems are utilized for the course. The course covers WANs and Routers, Router CLI, Router Components, Router Start-up and Setup, Router Configuration, IOS Images, TCP/IP, IP Addressing, Routing, Routing Protocols, and Network Troubleshooting. The course utilizes multi-media, computer-based training materials plus hands-on lab experience with LAN switches and routers. This course may be offered in a distance learning format.
CIS 33  CISCO NETWORKING CCNA 3 – LAN SWITCHING AND DESIGN (formerly MIS 33/MIS 3) – 3 Units (S)
Prerequisite: A grade of C or higher in CIS 32
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
This course is the third in a four-course series designed to prepare students for the Cisco Certified Networking Associate (CCNA) Exam. This course is offered by Shasta College as the Cisco Regional Networking Academy in the region. Instructional materials developed by Cisco Systems are utilized for the course. The course covers LAN Switching, Virtual LANs, LAN Design, IGRP protocols, Access Control Lists, Novell IPX protocol, and network management. The course utilizes multi-media, computer-based training materials plus hands-on lab experience with LAN switches and routers. This course may be offered in a distance learning format.

CIS 34  CISCO NETWORKING CCNA 4 – WAN TECHNOLOGY & DESIGN (formerly MIS 34/MIS 4) – 3 Units (S)
Prerequisite: A grade of C or higher in CIS 33
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
This course is the fourth in a four-course series designed to prepare students for the Cisco Certified Networking Associate (CCNA) Exam. This course is offered by Shasta College as the Cisco Regional Networking Academy in the region. Instructional materials developed by Cisco Systems are utilized for the course. The course covers WANs, WAN Design, Point to Point Protocol, ISDN, and Frame Relay. The course utilizes multi-media, computer-based training materials plus hands-on lab experience with LAN Routers. This course may be offered in a distance learning format.

CIS 35  CISCO NETWORKING CCNP 1 – ADVANCED ROUTING CONFIGURATION (formerly MIS 5) – 3 Units (F)
Prerequisite: A grade of C or higher in CIS 34 or CCNA certification
Note: CIS 35, CIS 36, and CIS 37 may be taken in any order
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
CIS 35 one of a four-course series designed to prepare students for the Cisco Certified Networking Professional (CCNP) Exam. This course is offered by Shasta College as the Cisco Regional and Local Networking Academy in the area. Instructional materials developed by Cisco System are utilized for the course. The course covers advanced routing topics including managing IP Traffic, traffic designed, routing protocols (OSPF, EIGRP, BGP), VLSMs, Quality of Service. The course utilizes multi-media, computer-based training materials developed by Cisco Systems, plus hands-on lab experience with routers. This course may be offered in a distance learning format.

CIS 36  CISCO NETWORKING CCNP 2 – REMOTE-ACCESS NETWORKS (formerly MIS 6) – 3 Units (S)
Prerequisite: A grade of C or higher in CIS 34 or CCNA certification
Note: CIS 35, CIS 36, and CIS 37 may be taken in any order
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
CIS 36 is one of a four-course series designed to prepare students for the Cisco Certified Networking Professional (CCNP) Exam. This course is offered by Shasta College as the Cisco Regional and Local Networking Academy in the area. Instructional materials developed by Cisco System are utilized for the course. The course covers topics related to remote access to networks including: asynchronous connections, accessing central site with Microsoft Windows, PPP, ISDN and DDR, configuring Cisco 700 series router, dedicated frame relay connections, traffic shaping, backup connections, optimizing traffic, scaling IP addresses with PAT and NAT, troubleshooting. The course utilizes multi-media, computer-based training materials developed by Cisco Systems plus hands-on lab experience with routers. This course may be offered in a distance learning format.

CIS 37  CISCO NETWORKING CCNP 3 – MULTI-LAYER SWITCHING (formerly MIS 7) – 3 Units (F)
Prerequisite: A grade of C or higher in CIS 34 or CCNA certification
Note: CIS 35, CIS 36, and CIS 37 may be taken in any order
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
CIS 37 is one of a four-course series designed to prepare students for the Cisco Certified Networking Professional (CCNP) Exam. This course is offered by Shasta College as the Cisco Regional and Local Networking Academy in the area. Instructional materials developed by Cisco System are utilized for the course. The course covers topics related to multi-layer switching in computer networks including: network design, media types, switch configuration, VLANs, trunking, spanning tree protocol, redundant links, multiplayer switching, hot standby routing protocol, multicasting, restricting network access. The course utilizes multi-media computer-based training materials developed by Cisco Systems, plus hands-on lab experience with routers. This course may be offered in a distance learning format.

CIS 38  CISCO NETWORKING CCNP 4 – INTERNETWORK TROUBLESHOOTING (formerly MIS 8) – 3 Units (S)
Prerequisite: A grade of C or higher in CIS 35, CIS 36, CIS 37
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
CIS 38 is the last course in a four-course series designed to prepare students for the Cisco Certified Networking Professional (CCNP) Exams. This course is offered by Shasta College as the Cisco Regional and Local Networking Academy in the area. Instructional materials developed by Cisco Systems are utilized for the course. The course covers topics related to multi-layer switching in computer networks including: problem-solving model, network management software, diagnostic commands, troubleshooting TCP/IP, troubleshooting in LAN switching environment, troubleshooting VLANs, routing & switching processes, troubleshooting frame relay, troubleshooting ISDN, Novell IPX, Appletalk, troubleshooting EIGRP, troubleshooting OSPF, troubleshooting BGP. The course utilizes multi-media computer-based training materials developed by Cisco Systems, plus hands-on lab experience with routers. This course may be offered in a distance learning format.

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Subject to change. Check the current class schedule.
CIS 39  CISCO NETWORKING – FUNDAMENTALS OF NETWORK SECURITY - 3 Units (F/S)
Advisory: A grade of C or higher in CIS 34 or CCNA Certification
Class Hours: 45 lecture/27 lab total
This course is offered by Shasta College in its role as a Cisco Local Networking Academy. This course prepares students for the Cisco SECUR and CSPFA certifications, and the Comptia Security+ certifications. These are widely recognized certifications 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 high-demand 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, hands-on equipment configuration.

CIS 50  INSTALL, CONFIGURE, AND ADMNISTER MS WINDOWS XP PROFESSIONAL – 1 Unit (F)
Class Hours: 9 lecture/27 lab total
A Microsoft Certified Professional course. The terminology, planning, installation, configuring, administering and troubleshooting of Microsoft Windows XP Professional will be covered. This course is specifically designed to prepare the student to successfully participate in the Installing, Configuring, and Administering Microsoft Windows XP Professional examination to become a Microsoft Certified Professional (MCP).

CIS 51  MANAGE AND MAINTAIN A MS WINDOWS SERVER 2003 ENVIRONMENT – 1 Unit (F)
Class Hours: 9 lecture/27 lab total
The terminology, managing, maintaining, configuring, administering and troubleshooting of Microsoft Windows Server 2003 will be covered. This course is specifically designed to prepare the student to successfully participate in the Managing and Maintaining Microsoft Windows Server 2003 Environment examination to become a Microsoft Certified Professional (MCP).

CIS 52  MANAGE AND MAINTAIN WINDOWS 2003 NETWORK INFRASTRUCTURE – 1 Unit (F)
Class Hours: 9 lecture/27 lab total
The terminology, implementing, managing, maintaining, configuring, administering and troubleshooting of Microsoft Windows Server 2003 network infrastructure will be covered. This course is specifically designed to prepare the student to successfully participate in the Implementing, Managing and Maintaining Microsoft Windows Server 2003 Network Infrastructure examination to become a Microsoft Certified Professional (MCP).

CIS 53  PLAN AND MAINTAIN WINDOWS 2003 NETWORK INFRASTRUCTURE – 1 Unit (S)
Class Hours: 9 lecture/27 lab total
The terminology, planning, and maintaining, a Microsoft Windows Server 2003 network infrastructure will be covered. This course is specifically designed to prepare the student to successfully participate in the Planning and Maintaining Microsoft Windows Server 2003 Network Infrastructure examination to become a Microsoft Certified Professional (MCP).

CIS 54  PLAN, IMPLEMENT AND MAINTAIN WINDOWS 2003 AD NETWORK INFRASTRUCTURE – 1 Unit (S)
Class Hours: 9 lecture/27 lab total
The terminology, planning, implementing and maintaining a Microsoft Windows Server 2003 active directory infrastructure will be covered. This course is specifically designed to prepare the student to successfully participate in the Planning, Implementing and Maintaining Microsoft Windows Server 2003 Active Directory Infrastructure examination to become a Microsoft Certified Professional (MCP).

CIS 55  DESIGNING A WINDOWS SERVER 2003 AD AND NETWORK INFRASTRUCTURE – 1 Unit (S)
Class Hours: 9 lecture/27 lab total
The terminology and design of a Microsoft Windows Server 2003 Active Directory network infrastructure will be covered. This course is specifically designed to prepare the student to successfully participate in the Designing a Microsoft Windows Server 2003 Active Directory and Network Infrastructure examination to become a Microsoft Certified Professional (MCP).

CIS 56  DESIGNING SECURITY FOR A WINDOWS SERVER 2003 NETWORK – 1 Unit (Summer)
Class Hours: 9 lecture/27 lab total
The terminology and design of security for a Microsoft Windows Server 2003 Network will be covered. This course is specifically designed to prepare the student to successfully participate in the Designing Security for a Windows Server 2003 Network examination to become a Microsoft Certified Professional (MCP).

CIS 57  INTRODUCTION TO COMPUTERS THROUGH GAMING – 3 Units (F/S)
Class Hours: 36 lecture/54 lab total
This course is designed to get students interested in the computer field by teaching concepts as they relate to computer gaming. The course will cover the necessary computer troubleshooting and repair, networking, internet research, and overall computer knowledge needed to use sophisticated networked and online games. This course will include hands-on activities such as labs and projects to further learning and experience.

CIS 60  VISUAL BASIC PROGRAMMING (formerly BUSI 27/MIS 27) - 3 Units (CAN# CSCI 6) (I)
Advisory: A grade of C or higher in CIS 2
Class Hours: 36 lecture/54 lab total
This course is intended to teach programming techniques using Visual Basic language. Students will be introduced to Visual Basic statements including, but not limited to input, output, computation, looping, arrays, subroutines, file processing commands, form layout, objects, events and Visual Basic tools. Students will design, code, test and execute several detailed business-oriented programs ranging from very simple to complex.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>CR/NC Option</th>
<th>Semester Offered</th>
<th>Prerequisites</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 61</td>
<td>C++ LANGUAGE PROGRAMMING (formerly MIS 25)</td>
<td>3</td>
<td>(CAN # CSCI 16)</td>
<td>I</td>
<td>A grade of C or higher in CIS 2</td>
<td>Advisory: A grade of C or higher in CIS 2. Class Hours: 36 lecture/54 lab total. A study of the C++ Programming language. Emphasis is placed on programming theory and structure including data types, selection and interaction structures, functions, arrays, pointers, graphics, objects and classes.</td>
</tr>
<tr>
<td>CIS 62</td>
<td>JAVA PROGRAMMING (formerly MIS 17)</td>
<td>3</td>
<td>I</td>
<td>I</td>
<td>A grade of C or higher in CIS 2</td>
<td>Advisory: A grade of C or higher in CIS 2. Class Hours: 36 lecture/54 lab total. Java is a platform-neutral, object-oriented, and secure programming language that is quickly becoming the standard programming language for creating interactive content on the World Wide Web (WWW). This course covers Java programming language and the standard Java class libraries.</td>
</tr>
<tr>
<td>CIS 63</td>
<td>ASSEMBLER LANGUAGE PROGRAMMING (formerly MIS 24)</td>
<td>4</td>
<td>(CAN # CSCI 10)</td>
<td>I</td>
<td>A grade of C or higher in CIS 2 or CIS 62.</td>
<td>Prerequisite: A grade of C or higher in CIS 2 and one of the following courses: CIS 60, CIS 61, or CIS 62. Class Hours: 54 lecture/54 lab total. 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.</td>
</tr>
<tr>
<td>CIS 70</td>
<td>WINDOWS I (formerly MIS 45/OAS 74)</td>
<td>1</td>
<td>S</td>
<td>F/S</td>
<td>A grade of higher in CIS 70</td>
<td>Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Class Hours: 18 lecture/9 lab total. (when offered in the Distance Education format, hours will total 63). This course is designed to familiarize students with Microsoft Windows. It is a hands-on course designed to give the student a beginning knowledge of Windows' graphical user interface. Topics covered will include manipulating Windows, using Help, launching and running multiple applications, transferring information between applications, and managing files and folders on a disk with Explorer and My Computer. This course may be offered in a distance learning format.</td>
</tr>
<tr>
<td>CIS 71</td>
<td>WINDOWS II (formerly MIS 46)</td>
<td>1</td>
<td>CR/NC Option</td>
<td>I</td>
<td>A grade of C or higher in CIS 70</td>
<td>Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Class Hours: 18 lecture/9 lab total. This course extends beyond the basics of the Windows' graphical user interface. Topics will include sharing data between applications, using Print manager, customizing folders and toolbars, advanced file management and system maintenance. Multimedia and communications will be introduced.</td>
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<tr>
<td>CIS 72</td>
<td>FUNDAMENTALS OF UNIX</td>
<td>3</td>
<td>I</td>
<td>I</td>
<td>A grade of C or higher in ELEC 21 and a grade of C or higher in CIS 2</td>
<td>Advisory: A grade of C or higher in CIS 2. Class Hours: 45 lecture/27 lab total. Fundamentals of Unix is an introductory course for new users of the UNIX operating environment. Students will learn fundamental command-line features of UNIX including file system navigation, changing file permissions, directory management, the vi and emacs text editors, Korn and Bash shell features, backup/archive and recovery, and basic network use. The course teaches how to use the UNIX operating system and introduces the CDE, GNOME, and KDE graphical user interface (GUI). The course will utilize both the Linux and Sun Solaris versions of the UNIX operating system, as well as GUI features that include Application Managers, File Managers, Text Editors, printing and mail.</td>
</tr>
<tr>
<td>CIS 80</td>
<td>INTERNET BASICS (formerly MIS 81)</td>
<td>1</td>
<td>CR/NC Option</td>
<td>S</td>
<td>A grade of higher in CIS 2 and a grade of C or higher in one of the following courses: CIS 60, CIS 61, or CIS 62.</td>
<td>Note: Students taking the Internet format of this class must have access to the Internet and Windows 98 (or better) Class Hours: 18 lecture/9 lab total. (when offered in the Distance Education format, hours will total 63) This course is designed to familiarize students with the Internet. It is a hands-on course that will provide the student with an understanding of what the Internet is and a working knowledge of the hardware and software used to access the Internet, how to use e-mail, searching, news groups, etc. This course may be offered in a distance learning format.</td>
</tr>
<tr>
<td>CIS 81</td>
<td>WEB DESIGN (FRONTPAGE I) (formerly MIS 80)</td>
<td>1</td>
<td>CR/NC Option</td>
<td>S</td>
<td>A grade of C or higher in CIS 2</td>
<td>Advisory: Basic knowledge of word processing, Windows, and the Internet Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Class Hours: 18 lecture/9 lab total. This course introduces the student through lecture and hands-on operation to the use of various software (IBM compatible) for Web page authoring, Microsoft FrontPage and other web authoring tools will be demonstrated and used. Focus is on the functions of creating, editing, saving, and publishing Web pages. Topics include formatting text, graphical elements, hypertext links, lists, tables, forms, and other active web authoring elements. This course may be offered in a distance learning format.</td>
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</tbody>
</table>

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year. Subject to change. Check the current class schedule.
CIS 84  HTML – BEGINNING  – 1 Unit (CR/NC Option) (I)
Prerequisite: A grade of C or higher in CIS 81
Note: This class does not require any special software. Assignments may include work outside class, with the use of a computer with standard browsers like Internet Explorer or Netscape Navigator. Computer access is provided on campus at the Math and Business Learning Center.
Class Hours: 18 lecture/9 lab total

CIS 85  HTML – INTERMEDIATE – 1 Unit (CR/NC Option) (I)
Prerequisite: A grade of C or higher in CIS 84
Note: This class does not require any special software. Assignments may include work outside class, with the use of a computer with standard browsers like Internet Explorer or Netscape Navigator. Some computer access is provided on campus at the Math and Business Learning Center.
Class Hours: 18 lecture/9 lab total
Intermediate level course on the Hypertext Markup Language for web page authoring, through lecture and hands-on classes. Topics include: use of FRAME structures and targeting links within FRAMES, FORMS and their attributes. Layout and text formatting with the use of the STYLE tag. Basic multimedia creation, and incorporation of multimedia files in web pages. Insertion of applets in an HTML document. Importing Dynamic HTML to the web page structure.

CIS 90  A+ CERTIFICATION PREPARATION/CISCO IT ESSENTIALS I – 4 Units  (F/S)
Advisory: A grade of C or higher in CIS 2
Note: This course replaces ELEC 20, 21, 22, 23 and 24 for A+ Certification
Class Hours: 54 lecture/54 lab total
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.

CIS 92  INTRODUCTION TO COMPUTER SECURITY – SECURITY + – 3 Units (F/S)
Advisory: A grade of C or higher in CIS 31
Class Hours: 45 lecture/27 lab total
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.

CIS 94  COMPUTER INFORMATION SYSTEMS WORKSITE LEARNING – 1-4 Units (CR/NC Option) (F/S)
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Credits</th>
<th>CR/NC Option</th>
<th>Offered</th>
<th>Class Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 97</td>
<td>SPECIAL TOPICS IN MANAGEMENT INFORMATION SYSTEMS (formerly MIS 97)</td>
<td>0.5-2</td>
<td>Units</td>
<td>CR/NC Option</td>
<td>I</td>
<td>9-36 lecture</td>
<td>This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in management information systems. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.</td>
</tr>
<tr>
<td>CIS 98</td>
<td>SPECIAL LAB TOPICS IN MANAGEMENT INFORMATION SYSTEMS (formerly MIS 98)</td>
<td>0.5-2</td>
<td>Units</td>
<td>CR/NC Option</td>
<td>I</td>
<td>27-108 lab</td>
<td>This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in management information systems. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.</td>
</tr>
<tr>
<td>CIS 197</td>
<td>SPECIAL TOPICS IN COMPUTER TECHNOLOGY (formerly MIS 197)</td>
<td>0.5-2</td>
<td>Units</td>
<td>CR/NC Option</td>
<td>I</td>
<td>9-36 lecture</td>
<td>This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of office technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommend for any of the Office Technologies majors or Business majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.</td>
</tr>
<tr>
<td>CIS 198</td>
<td>SPECIAL LAB TOPICS IN COMPUTER TECHNOLOGY (formerly MIS 198)</td>
<td>0.5-2</td>
<td>Units</td>
<td>CR/NC Option</td>
<td>I</td>
<td>27-108 lab</td>
<td>This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in computer technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.</td>
</tr>
<tr>
<td>CONS 46</td>
<td>EQUIPMENT OPERATIONS &amp; MAINTENANCE (formerly AGRI 46/ENVR 46)</td>
<td>3</td>
<td>Units</td>
<td>CR/NC Option</td>
<td>F/S</td>
<td>27 lecture/81 lab</td>
<td>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. This class covers basic skill-level operation and maintenance of on- and off-road heavy equipment including agriculture and earth moving. Students will not be allowed to operate road equipment without license and driving record. Operational equipment used may include any of the following: dump truck, grader, backhoe, dozer, farm tractor, loader, excavator, forklift, and scraper.</td>
</tr>
<tr>
<td>CONS 48</td>
<td>SURVEYING FOR EQUIPMENT OPERATORS (formerly AGRI 48)</td>
<td>2</td>
<td>Units</td>
<td>CR/NC Option</td>
<td>F/S</td>
<td>18 lecture/54 lab</td>
<td>Advisory: A grade of C or higher in MATH 100 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.</td>
</tr>
<tr>
<td>CONS 52</td>
<td>RESIDENTIAL ESTIMATING</td>
<td>3</td>
<td>Units</td>
<td>S</td>
<td></td>
<td>54 lecture total</td>
<td>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.</td>
</tr>
<tr>
<td>CONS 53</td>
<td>MATERIALS OF CONSTRUCTION</td>
<td>3</td>
<td>Units</td>
<td>F</td>
<td></td>
<td>54 lecture total</td>
<td>A general survey course covering building materials from concrete to roofing. It covers topics such as map reading, blueprint interpretation, building code requirements and the methods of application of the said materials as they relate to building construction techniques. In this class students will become familiar with traditional as well as the latest construction materials, their characteristics, uses, and field applications.</td>
</tr>
</tbody>
</table>

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year. Subject to change. Check the current class schedule.
CONS 55  EQUIPMENT OPERATIONS SKILLS DEVELOPMENT (formerly AGRI 56EH/AGRI 55/ENVR 55) - 1-4 Units (CR/NC Option) (F)
Prerequisite: A grade of C or higher in CONS 46
Limitation on Enrollment: Student must produce a negative test result in accordance with Shasta College Student Substance Abuse Testing Policy at a student cost to be paid to the designated testing facility.
Class Hours: 54 lab hours per unit
The practical application of skills needed to be successful in equipment operation. Includes farm and industrial equipment such as wheel and crawler tractors, forklift, backhoe, motor grader and scraper. Service and adjustment will also be a part of this course. Required of all transfer agriculture, production agriculture, and ornamental horticulture majors. Note: This course may be repeated three times for a maximum of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.

CONS 71  WOODWORKING (formerly CONS 71A) - 3 Units (F/S)
Class Hours: 36 lecture/54 lab total
This course is designed to develop skill and appreciation in the woodworking craft. Instruction is given on safety and proper use of hand tools and power machinery. In this course the student may work on a project of their own choice.

CONS 72  CABINETMAKING (formerly CONS 71B) - 3 Units (F/S)
Prerequisite: A grade of C or higher in CONS 71
Class Hours: 36 lecture/54 lab total
This course will enable the student to have an understanding of cabinet standards, typical types found in most kitchens, bathrooms and garages. Styles of kitchens, types of layouts for all four basic case type cabinets. Be able to select counter tops, drawer construction and door construction.

CONS 73  FURNITURE AND CABINET FINISHING (formerly CONS 71C) - 3 Units (S)
Prerequisite: A grade of C or higher in CONS 71
Class Hours: 36 lecture/54 lab total
This course is designed to teach inorganic as well as organic finishing in vocational and industrial applications. It is divided into sections which describe various categories in the broad field of cabinet finishing.

CONS 74  TRIM AND DETAIL FINISHING (formerly CONS 71D) - 3 Units (F)
Prerequisite: A grade of C or higher in CONS 71
Class Hours: 36 lecture/54 lab total
This course will provide essential knowledge and skill related to deck, closet treatments, inside and outside window and door treatments.

CONS 84  ANALYSIS OF CONSTRUCTION DRAWINGS AND SPECIFICATIONS - 3 Units (F)
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  WORKSITE LEARNING FOR CONSTRUCTION TECHNOLOGY - 1-4 Units (F/S)
Limitation on Enrollment: During regular semesters, students must enroll in a minimum of seven units including the Worksite Learning course. During summer sessions, students must enroll in one other class in addition to the Worksite Learning course. Students must have completed 30 units of required construction technology course work.
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. Note: This course may be repeated three times for a total of four enrollments since content differs and skills are enhanced by supervised repetition and practice.

CONS 148  SURVEYING AND GRADE SETTING FOR CONSTRUCTION (formerly AGRI 148) - 1 Unit (CR/NC Only) (I)
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 150  INTRODUCTION TO RESIDENTIAL CONSTRUCTION - 3 Units (F/S)
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 151  CARPENTRY PRACTICES I (formerly CONS 151A) - 6 Units (F)
Class Hours: 54 lecture/162 lab total
The purpose of this two-year course is to train competent persons for the construction field. Related information including interpretation of layout, estimation of construction costs and choice quantities of materials will be emphasized. Basic skill will be developed with each phase of the job: foundation, framing, exterior and interior trim, and cabinet work. The course will permit the student to fulfill the greater portion of apprenticeship requirement while enjoying the atmosphere of higher education. Basic information of building codes will be covered.
CONS 152  CARPENTRY PRACTICES II (formerly CONS 151B) - 6 Units  (S)
Class Hours:  54 lecture/162 lab total
The purpose of this class is to train and develop educational opportunities for persons in the construction industry. 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. The course will permit the student to fulfill the greater portion of apprenticeship requirements while enjoying the atmosphere of higher education. Basic information about building codes will be covered.

CONS 154  RESIDENTIAL PLUMBING - 3 Units  (F)
Class Hours:  36 lecture/54 lab total
This course is designed to give the student entry-level job skills in the residential plumbing trade.

CONS 155  RESIDENTIAL ELECTRICAL - 3 Units  (S)
Class Hours:  36 lecture/54 lab total
This course in residential electrical is designed to give the student a basic understanding of how to run a variety of circuits, grounding systems, and familiarize them to the National Electrical Code.

CONS 168  GENERAL SHOP/WOODWORKING - 2 Units  (CR/NC Option)  (F/S/I)
Class Hours:  18 lecture/54 lab total
A skill development course in furniture construction. Course activities will stress power tool setup and use. Related instruction will include wood selection and ordering, furniture plan reading and development, joints, adhesives, abrasives, finishes, furniture hardware, and fasteners. Students will select projects that will demonstrate skills. Note: Since skills are enhanced by supervised practice and repetition, this course may be repeated three times for a total of four enrollments.

CONS 178  BUILDING CODES AND STANDARDS - 3 Units  (F/S)
Class Hours:  54 lecture total
This course is designed to provide the craftsperson, building, designer, and inspector with knowledge and insight regarding building regulations and requirements for minimum construction guidelines and specifications. It covers the use of the latest Uniform Building, Plumbing, Mechanical and Electric Codes and assists in using them to the builder's advantage. The class also provides information on sources of assistance and publications to meet the needs for dwelling construction industry.

CONS 197  SPECIAL TOPICS IN CONSTRUCTION TECHNOLOGY - .5-2 Units  (CR/NC Option)  (I)
Class Hours:  9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge and historical issues in the field of Construction Technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Construction Technology majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.

COOPERATIVE EDUCATION (COOP)

COOP 94  COOPERATIVE EDUCATION – 8 Units  (F/S)
Prerequisite: Successful completion of 7 units of course work in the occupational discipline (as defined in the Shasta College Related Disciplines List) prior to enrollment
Note 1: Student limited to one other class (not to exceed 3 units) during a semester of Co-op Ed (Alternative Plan)
Place of employment must be an “Approved Site” as determined by the Co-op Ed Coordinator
Note 2: Place of employment must be an “Approved Site” as determined by the Co-op Ed instructor
Class Hours:  600 hours for 8 units paid work/480 hours for 8 units non-paid work
The Cooperative Education (Co-op Ed) course is considered as an Alternative Plan of Worksite Learning designed to offer students work experience related to their occupational area. Co-op Ed allows the student to alternately attend college and work in an occupational area (as defined in the Shasta College Related Disciplines List). A maximum of (8) eight units per semester, for a total of 16 units can be earned for Co-op Ed. Sixteen (16) units is the maximum a student can earn for the combined Co-op Ed/WSL occupational courses. A student cannot transfer between the WSL and Co-op Ed Plans until they have earned at least seven (7) units of additional class work after completion of the WSL or Co-op Ed course. Note: The Co-op Ed course can be repeated one time for a maximum of 16 units.

CULINARY ARTS  (CULA)

The following courses will require extensive reading and math exercises.

CULA 45  BASIC FOOD PRODUCTION – 5 Units (F/S)
Corequisite: Students must be concurrently enrolled in, or have completed CULA 50 with a grade of C or higher
Class Hours:  18 lecture/216 lab total
This course involves preparing and cooking of foods, understanding kitchen operations and the proper use of safety and sanitation procedures in the kitchen. This will prepare the students for the Advanced Food Preparation class and will prepare skilled food personnel in kitchen procedures.

“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year. Subject to change. Check the current class schedule.
CULA 46  ADVANCED FOODS – 5 Units (S)
Prerequisite: A grade of C or higher in CULA 45 and a grade of C or higher in CULA 50
Class Hours: 18 lecture/216 lab total
This course examines advanced principles of food preparation of foods served in restaurants. Emphasis given to the planning and preparation of food products relating to restaurants, hotels, and specialty food operations.

CULA 49  MENU PLANNING AND COST ANALYSIS – 2 Units (S)
Class Hours: 27 lecture/27 lab total
This course is designed to summarize the basic principles of menu planning and layout for various food service operations. Topics included are pricing, nutrition, and types of menus.

CULA 50  SANITATION & SAFETY (formerly CULA 150) - 2 Units (F/S)
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 36 lecture (when offered in the Distance Education format, hours will total 108)
The course examines the basic principles of hygiene and sanitation and the application of these principles to food service operations. It also includes safety elements in food service planning; description of maintenance and operation of the appropriate food service equipment, and OSHA regulations. Emphasis will be placed on the supervisors’ responsibilities in maintaining high sanitation and safety standards. This course may be offered in a distance learning format.

CULA 55  PURCHASING (formerly CULA 155) - 2 Units (S)
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 36 lecture total (when offered in the Distance Education format, hour will total 108)
This course will cover the function of purchasing from the viewpoint of management. It 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 learning format.

CULA 56  CATERING (formerly CULA 156) - 1 Unit (I)
Corequisite: Students must be concurrently enrolled in CULA 94
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 18 lecture total
This course is an overview of different aspects of operating a successful catering business. The focus is to learn various management techniques that will assist students in the catering industry. Students must concurrently enroll in a minimum of one unit in CULA 94 at a catering training facility. (This one unit of CULA 94 applies to the program requirement of three units of Worksite Learning for the spring semester.)

CULA 60  BEVERAGE MANAGEMENT – 2 Units (F)
Class Hours: 36 lecture total
Identification, production, purchasing, and service of spirits, wine and beer products. Marketing, menu development, and cost controls of a beverage operation. Special emphasis on staffing, training, and legal regulations for beverage sales.

CULA 65  DINING ROOM SERVICE – 3 Units (F/S)
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 (F)
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 (S) (CR/NC Option)
Limitation on Enrollment: Students must be 21 years of age or older to take this course
Class Hours: 36 lecture total
Characteristics of wines from the major varietals emphasized. Identification of wines from the wine districts of California, France, Germany, and Italy. The concept of food and wine pairing will also be evaluated.

CULA 74  BASIC WINEMAKING - 2 Units (CR/NC Option) (F)
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 76 INTERMEDIATE WINEMAKING - 2 Units (CR/NC Option) (S)
Prerequisite: A grade of C or higher in CULA 74
Limitation on Enrollment: Students must be 21 years of age or older to take this course.
Class Hours: 54 lecture
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge 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 (CR/NC Option) (S)
Prerequisite: A grade of C or higher in CULA 73 or CULA 66
Limitation on Enrollment: Students must be 21 years of age or older to take this course.
Class Hours: 36 lecture
This course will provide the student a better understanding of wine by learning about the senses and how to use them. Students will learn how to describe wines precisely, practice tasting varietals, learn how to judge good and bad wines, and how a wine’s sensory characteristics are created in the vineyard and the winery.

CULA 80 WINE SALES AND MARKETING - 3 Units (CR/NC Option) (F)
Class Hours: 54 lecture
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.

CULA 94 CULINARY ARTS WORKSITE LEARNING - 1-4 Units (F/S)
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

CULA 97 SPECIAL TOPICS IN CULINARY ARTS - .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in culinary arts. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

CULA 98 SPECIAL LAB TOPICS IN CULINARY ARTS - .5-2 Units (CR/NC Option) (I)
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in culinary arts. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

CULA 159 STOCKS, SOUPS, SAUCES & BASIC CULINARY PREPARATION - 2 Units (I)
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.

CULA 161 THE ART OF GARDE MANGER (PREPARATION & PRESENTATION OF GARNISHED FOODS)-2 Units (S)
Class Hours: 18 lecture/54 lab total
This course is about the artwork of the food service industry that blends aesthetic and practical aspects of food presentation. The course stresses skills in producing a variety of cold food products. The student will also prepare items appropriate for buffet presentations which will include decorative pieces.

CULA 167 CAFETERIA BASIC SKILLS: BASIC FOODS - 3 Units (I)
Class Hours: 45 lecture/27 lab total
An overview of basic skills involved in preparing and serving nutritious, acceptable foods in schools, child care centers, and family day care programs. Subject areas include food preparation principles and standardized recipes including qualities of standard food products; components of the reimbursable meal pattern; *United States Dietary Guidelines; and the four food groups; safety and sanitation standards and procedures; portion control; basics of work improvements and record keeping; and methods for developing positive staff morale.

“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year.
Subject to change. Check the current class schedule.
CULA 170  MENU DESIGN - 3 Units  (I)
Class Hours:  54 lecture total
An overview of menu planning for child nutrition programs including meal planning options, nutrition standards, menu writing, student preferences, marketing and evaluation. Procedures for developing standardized products, budgetary controls, and evaluating procurement and delivery systems meeting federal, state, and local standards.

CULA 171  INTRODUCTION TO CHILD NUTRITION PROGRAMS FOR MANAGERS - 3 Units  (I)
Class Hours:  54 lecture total
An overview of challenges and responsibilities in child nutrition programs, school and food service organization; nutrition issues and the evaluation of nutrition information; meal planning and food acceptability; issues in food procurement; nutrient retention in food production; requirements for sanitation and safety; records and accountability; cost control procedures; personnel job satisfaction and professionalism; training procedures; marketing, public relations, and nutrition education.

CULA 172  BAKING - 2 Units  (I)
Class Hours:  18 lecture/54 lab total
Students in this course will learn and practice dessert and bread production from formulas used in quantity food service. Cost and nutritional content will be emphasized.

DANCE  (DAN)

DAN 20  MODERN DANCE I (formerly PE 40 and HPE 36AB) - .5-1 Unit  (CR/NC Option)  (F/S)
Class Hours:  27 or 54 total activity
Fundamental movement, techniques, terminology, basic rhythm and simple choreography of modern dance. Note: This class may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

DAN 21  MODERN DANCE 2 (formerly PE 43 and HPE 47AD and HPE 36CD) - .5-1 Unit  (CR/NC Option)  (S)
Class Hours:  27 or 54 total activity
A class for modern dance students interested in more technical and sophisticated performing and choreography. Note: This course may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

DAN 30  BALLET 1 (formerly PE 41 and HPE 37AB) - .5-1 Unit  (CR/NC Option)  (F/S)
Class Hours:  27 or 54 total activity
An introduction to the art form of classical concert dance. Beginning technique, emphasis on body placement, introduction to classical ballet terminology used worldwide, recognition of the musical rhythms that accompany specific historic steps, beginning choreography of most used ballet step combinations and patterns. Note: This class may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

DAN 31  BALLET 2 (formerly PE 44 and HPE 45AD and HPE 37CD) - .5-1 Unit  (CR/NC Option)  (F/S)
Class Hours:  27 or 54 total activity
A class for ballet students interested in developing a more technical and sophisticated aspect of classical dance. Students will be instructed in the purpose of the classical syllabus exercises and be able to identify their purpose. Students will gain knowledge of the different schools of thought, the terminology of classical dance. There are performance and choreographic opportunities. Note: This course may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

DAN 40  JAZZ DANCE 1 (formerly PE 42 and HPE 72AB) - .5-1 Unit  (CR/NC Option)  (F/S)
Class Hours:  27 or 54 total activity
Fundamental movement, techniques, terminology, basic rhythm, and simple choreography of modern dance. Note: This class may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

DAN 41  JAZZ DANCE 2 (formerly PE 45 and HPE 72CD and HPE 46AD) - .5-1 Unit  (CR/NC Option)  (F/S)
Class Hours:  27 or 54 total activity
A class for jazz dance students interested in more technical and sophisticated performing and choreography. Note: This course may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

DAN 50  TAP DANCE 1 (formerly PE 46) - .5-1 Unit  (CR/NC Option)  (F)
Class Hours:  27 or 54 total activity
This class will introduce beginning sounds of tap. It will build technique, both physical and mental of this classic art form. Note: Course may be repeated three times for a total of four enrollments since skill and proficiencies are enhanced by repetition and practice.
**DENTAL (DNTL)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Limitation on Enrollment</th>
<th>Note</th>
<th>Class Hours</th>
<th>Class Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNTL 10</td>
<td>ORAL BIOLOGY - 3 Units</td>
<td>3</td>
<td></td>
<td></td>
<td>The student must present enrollment letter to the instructor on the first day of school</td>
<td>54 lecture/18 lab total</td>
<td></td>
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<tr>
<td>DNTL 11</td>
<td>ORAL RADIOLOGY - 3 Units</td>
<td>3</td>
<td></td>
<td></td>
<td>The student must present enrollment letter to the instructor on the first day of school</td>
<td>36 lecture/54 lab total</td>
<td></td>
</tr>
<tr>
<td>DNTL 12</td>
<td>HEAD AND NECK ANATOMY - 2 Units</td>
<td>2</td>
<td></td>
<td></td>
<td>The student must present enrollment letter to the instructor on the first day of school</td>
<td>27 lecture/27 lab total</td>
<td></td>
</tr>
<tr>
<td>DNTL 13</td>
<td>DENTAL HEALTH EDUCATION/SEMINAR - 2 Units</td>
<td>2</td>
<td></td>
<td></td>
<td>The student must present enrollment letter to the instructor on the first day of school</td>
<td>36 lecture total</td>
<td></td>
</tr>
<tr>
<td>DNTL 14</td>
<td>INTRODUCTION TO CLINIC - 4 Units</td>
<td>4</td>
<td></td>
<td></td>
<td>The student must present enrollment letter to the instructor on the first day of school</td>
<td>108 lecture total</td>
<td></td>
</tr>
<tr>
<td>DNTL 20</td>
<td>LOCAL ANESTHESIA AND NITROUS OXIDE - 2 Units</td>
<td>2</td>
<td>A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14.</td>
<td>Enrollment in the Dental Hygiene Program</td>
<td></td>
<td>18 lecture/54 lab total</td>
<td></td>
</tr>
<tr>
<td>DNTL 21</td>
<td>GENERAL AND ORAL PATHOLOGY - 4 Units</td>
<td>4</td>
<td>A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14.</td>
<td>Enrollment in the Dental Hygiene Program</td>
<td></td>
<td>72 lecture total</td>
<td></td>
</tr>
<tr>
<td>DNTL 23</td>
<td>PATIENT MANAGEMENT AND GERIATRICS - 2 Units</td>
<td>2</td>
<td>A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14.</td>
<td>Enrollment in the Dental Hygiene Program</td>
<td></td>
<td>36 lecture total</td>
<td></td>
</tr>
<tr>
<td>DNTL 24</td>
<td>CLINICAL PRACTICE I - 4 Units</td>
<td>4</td>
<td>A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14.</td>
<td>Enrollment in the Dental Hygiene Program</td>
<td></td>
<td>162 lecture total</td>
<td></td>
</tr>
<tr>
<td>DNTL 25</td>
<td>CLINIC I SEMINAR - 2 Units</td>
<td>2</td>
<td>A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14.</td>
<td>Enrollment in the Dental Hygiene Program</td>
<td></td>
<td>36 lecture total</td>
<td></td>
</tr>
</tbody>
</table>

“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year. Subject to change. Check the current class schedule.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Class Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNTL 26</td>
<td>NUTRITION IN DENTISTRY - 1 Unit</td>
<td></td>
<td>Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13, and DNTL 14</td>
<td>18 lecture total</td>
<td>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.</td>
</tr>
<tr>
<td>DNTL 27</td>
<td>SUMMER CLINIC 27 - 1 Unit (CR/NC Only)</td>
<td></td>
<td>Prerequisite: Completion of DNTL 11, DNTL 12, DNTL 14, DNTL 20, DNTL 23, DNTL 24</td>
<td>54 lab total</td>
<td>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.</td>
</tr>
<tr>
<td>DNTL 30</td>
<td>PERIODONTICS I - 3 Units</td>
<td></td>
<td>Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26</td>
<td>54 lecture total</td>
<td>A course in periodontics teaching identification of the normal periodontium and recognition of deviations from normal; the etiology and principles of periodontal diseases, examination procedures, treatment and preventative measures.</td>
</tr>
<tr>
<td>DNTL 31</td>
<td>PHARMACOLOGY - 2 Units</td>
<td></td>
<td>Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26</td>
<td>36 lecture total</td>
<td>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.</td>
</tr>
<tr>
<td>DNTL 32</td>
<td>DENTAL MATERIALS - 2 Units</td>
<td></td>
<td>Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26</td>
<td>36 lecture/18 lab total</td>
<td>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.</td>
</tr>
<tr>
<td>DNTL 33</td>
<td>ADVANCED CLINICAL TOPICS - 2 Units</td>
<td></td>
<td>Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26</td>
<td>36 lecture total</td>
<td>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.</td>
</tr>
<tr>
<td>DNTL 34</td>
<td>CLINICAL PRACTICE II - 4 Units</td>
<td></td>
<td>Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26</td>
<td>216 lab total</td>
<td>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.</td>
</tr>
<tr>
<td>DNTL 35</td>
<td>CLINICAL II SEMINAR - 1 Unit</td>
<td></td>
<td>Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26</td>
<td>18 lecture total</td>
<td>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.</td>
</tr>
<tr>
<td>DNTL 40</td>
<td>PERIODONTICS II - 1 Unit</td>
<td></td>
<td>Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35</td>
<td>18 lecture total</td>
<td>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.</td>
</tr>
</tbody>
</table>
### DNTL 41  PRACTICE AND FINANCIAL MANAGEMENT - 1 Unit

**Prerequisite:** A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34, and DNTL 35  
**Class Hours:** 18 lecture total  
Office practice management; ethical and legal aspects of dentistry and dental hygiene, and business matters relating to dental hygiene practice.

### DNTL 42  CLINIC III SEMINAR - 2 Units

**Prerequisite:** A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34, and DNTL 35  
**Class Hours:** 18 lecture/54 lab total  
Provides an expanded clinical experience exposure through independent study or additional clinical experience.

### DNTL 43  CLINICAL PRACTICE III - 4 Units

**Prerequisite:** A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35  
**Class Hours:** 216 lab total  
Provides students with the opportunity to become more proficient in the clinical skills learned and practiced in previous clinical courses and to prepare them for success on their state and national board examinations.

### DNTL 44  COMMUNITY ORAL HEALTH - 3 Units

**Prerequisite:** A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35  
**Class Hours:** 54 lecture total  
Introduces students to the principles and practices of dental public health. The emphasis is placed on the role of the dental hygienist as an innovator of, and an educator in community health programs. Public health issues will be introduced and completely discussed.

### DNTL 45  ETHICS AND JURISPRUDENCE - 2 Units

**Prerequisite:** A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35  
**Class Hours:** 36 lecture total  
The study of the fundamental factors necessary to be employed and practice within the ethical and legal framework of the State Dental Practice Act and the Code of Ethics of the American Dental Association.

### DNTL 54  SUMMER CLINIC 54 - 1 Unit (CR/NC Only)

**Prerequisite:** A grade of C or higher in each of the following courses: DNTL 14, DNTL 20, DNTL 24, DNTL 30, DNTL 34, DNTL 43  
**Class Hours:** 54 lab total  
This course will provide students with the opportunity to become more proficient in the clinical skills learned and practiced during previous clinical courses and to prepare for success on their state clinical licensing examinations. This course is offered on a credit/no credit basis only.

### DIESEL TECHNOLOGY  (DIES)

**NOTE:** STUDENTS MUST PROVIDE THEIR OWN HAND TOOLS FOR TECHNICAL CLASSES IN THE DIESEL TECHNOLOGY AND AUTOMOTIVE TECHNOLOGY MAJORS IN ORDER TO COMPLETE REQUIRED COURSE OBJECTIVES.

#### DIES 30  HYDRAULIC TROUBLESHOOTING - 1 Unit  (F/S)

**Prerequisite:** A grade of C or higher in DIES 48  
**Class Hours:** 9 lecture/27 lab total  
This class is intended to demonstrate safe and effective troubleshooting procedures as required for industrial and mobile hydraulic equipment.

#### DIES 48  HYDRAULICS - 3.5 Units  (CR/NC Option)  (F/S)

**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  (CR/NC Option)  (S/I)

**Prerequisite:** A grade of C or higher in DIES 48  
**Class Hours:** 36 lecture/72 lab total  
This course will emphasize the application of cylinders and motor used to control fluid power systems. Hydraulic-pneumatic circuitry, maintenance, repair, and closed loop drives will be covered. Recommended for Equipment Operations and Maintenance, production, agriculture, and diesel majors.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.  
Subject to change. Check the current class schedule.
DIES 94  DIESEL TECHNOLOGY WORKSITE LEARNING – 1-4 Units (F/S)

Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.

Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units).

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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

DIES 158  DIESEL TUNE-UP AND FUEL SYSTEMS - 4 Units (I)

Class Hours: 36 lecture/108 lab total

This course will cover diesel fuel systems as related to testing, calibrating and diagnostic procedures. Mechanical and electronic diesel engine fuel controls will be covered.

DIES 160  DIESEL ENGINE ELECTRONIC CONTROL – 4 Units (I)

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 (F/S)

Prerequisite: A grade of C or higher in DIES 162

Corequisite: Students must be concurrently enrolled in DIES 94

Limitation on Enrollment: Student must be 18 years of age, provide his/her own transportation, DMV readout, and must be prepared to take a physical including drug test at the repair facility’s request.

Class Hours: 36 lecture total

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.

DIES 162  HEAVY DUTY POWER TRAIN - 4 Units (F)

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 (F)

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 165  AIR BRAKE SYSTEMS AND TROUBLESHOOTING - 2 Units (I)

Class Hours: 36 lecture total

This course will cover the operation and troubleshooting of air brakes pertaining to heavy duty equipment.

DIES 166  DIESEL ENGINES - 6 Units (S)

Prerequisite: A grade of C or higher in DIES 164

Class Hours: 54 lecture/162 lab total

This course is an in-depth study of various diesel engines, theory of design, operation and application. This lab will provide training in the disassembly and inspection of diesel engines, practical assembly procedures and technical analysis of engine services.

DIES 168  DISASSEMBLY AND ASSEMBLY OF THE CUMMINS DIESEL ENGINE - 2.5 Units (S)

Class Hours: 27 lecture/72 lab total

This course is an in-depth study of Cummins diesel engines, theory of design, operation and application. The lab will provide training in the disassembly and inspection of Cummins diesel engines, practical assembly procedures and technical analysis of engine service.

DIES 170  HEAVY DUTY BRAKING SYSTEMS - 4 Units (S)

Class Hours: 54 lecture/54 lab total

This course will cover the basic design and repair of foundation brakes and air systems pertaining to heavy duty vehicles.

DIES 191  DISASSEMBLY AND ASSEMBLY OF THE DETROIT DIESEL ENGINE - 2.5 Units (I)

Class Hours: 27 lecture/72 lab total

An in-depth study of Detroit diesel engines, theory of design, operation and application. The lab will provide training in the disassembly and inspection of Detroit diesel engines, practical assembly procedures and technical analysis of engines service.
### Early Childhood Education (ECE)

**ECE 1**
**Human Development - 3 Units (F/S)**
- **Class Hours:** 54 lecture total
- **Course Description:** 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.

**ECE 2**
**Child, Family, Community - 3 Units (F/S)**
- **Class Hours:** 54 lecture total
- **Course Description:** 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 learning format.

**ECE 3**
**Early Childhood Program Administration - 3 Units (F)**
- **Prerequisite:** A grade of C or higher in ECE 7
- **Note:** This course meets the Title 22 requirements for Teacher/Director qualifications.
- **Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)
- **Course Description:** 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 learning format.

**ECE 4**
**Introduction to Early Childhood Education - 1 Unit (F/S)**
- **Class Hours:** 18 lecture total (when offered in the Distance Education format, hours will total 54)
- **Course Description:** Introduction to Early Childhood Education provides the student with a basic orientation to careers related to working with young children. The course will offer an overview of child care settings, characteristics of effective child care providers and teachers, ethical issues and standards of this field, and training and employment opportunities. This course may be offered in a distance learning format.

### Dietary Services Supervisor (DSS)

**DSS 10**
**Food Production Management - 4 Units (CR/NC Option) (I)**
- **Advisory:** A grade of C or higher in CULA 50
- **Class Hours:** 54 lecture/54 lab total
- **Course Description:** This course will cover effective management skills in food production and the role of the Dietary Service Supervisor. Basic institutional cooking skills will be developed including using weight 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.

**DSS 63**
**Personnel Management, Supervision Techniques, and Training - 3 Units (CR/NC Option) (I)**
- **Class Hours:** 54 lecture total
- **Course Description:** 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.

**DSS 94**
**Dietary Service Supervisor Worksite Learning - 1-4 Units (I)**
- **Prerequisite:** A grade of C or higher in each of the following courses: DSS 10, DSS 63, and FSS 27
- **Limitation on Enrollment:** During regular semesters, students must enroll in a minimum of seven units including the Worksite Learning course. During summer sessions, students must enroll in one other class in addition to the Worksite Learning course.
- **Class Hours:** 75 hours paid or 60 hours non-paid per unit
- **Employment on approved jobs in the student’s major:** All WSL classes supervised by a faculty member to ensure that the work experience is of educational value. This course stresses good work habits and meeting of SCANS competencies through actual on the job performance. This course may be repeated three times for maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice. Dietary Service Supervisor majors must have a minimum of 3 units for both fall and spring semesters for each year.

Note:
- "F" and "S" indicate semester course is usually offered.
- "I" indicates course may not be offered every year.
- Subject to change. Check the current class schedule.
ECE 6  EXPLORING FAMILY CHILDCARE (formerly ECE 153) - 3 Units (I)
Class Hours: 54 lecture total
This course provides an introduction to family childcare. Topics presented include an overview of regulations, family childcare management, application of child growth and development principles, importance of culturally diverse and age appropriate activities, and safe and healthful setting in a family childcare.

ECE 7  EARLY CHILDHOOD OBSERVATION AND ASSESSMENT - 3 Units (F/S)
Prerequisite: A grade of C or higher in ECE 1
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 learning format to accommodate lab hours completed at a designated Early Childhood Mentor Site. Lecture hours will be regularly scheduled hours.)
This course provides the student with opportunities for further study of development and behavior of young children by developing skills in observation and assessment.

ECE 8  TEACHING PRACTICES FOR YOUNG CHILDREN - 5 Units (F)
Prerequisite: A grade of C or higher in ECE 7
Note: Supervised field site experience for the California Child Development Permit will be obtained through the course lab hours at the Shasta College Early Childhood Education Center or a designated Early Childhood Mentor Site.
Class Hours: 54 lecture/108 lab total (The lab portion of this course may be offered in a distance learning format to accommodate lab hours completed at a designated Early Childhood Mentor Site. Lecture hours will be regularly scheduled hours.)
This course focuses on identifying, developing and refining skills and behaviors essential for effective teaching of young children. The course is intended for students who are concurrently working or volunteering in center-based programs for young children (infant, toddler, preschool or after school care) where they have the opportunity to work directly with the children to test the methods and refine the teaching skills explored in the course.

ECE 10  EARLY CHILDHOOD LEARNING - 3 Units (I)
Class Hours: 54 lecture total
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.

ECE 11  MEETING SPECIAL NEEDS OF CHILDREN - 2 Units (S)
Prerequisite: A grade of C or higher in ECE 1
Class Hours: 36 lecture total
This course will focus on the special needs and behaviors of young children. Emphasis will be placed on classification and assessment of special needs, developmentally appropriate practices specific to special needs children with an emphasis on teaching strategies for classroom inclusion.

ECE 12  INFANT TODDLER LEARNING - 3 Units (F)
Class Hours: 54 lecture total
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.

ECE 13  ENVIRONMENTS FOR INFANT/TODDLER, PRESCHOOL OR SCHOOL-AGE CHILD CARE (formerly ECE 133 and ECE 152D) – 2 Units (F)
Class Hours: 36 lecture total
This course provides an in-depth study into the planning and implementation of developmentally appropriate learning environments for young children. Emphasis will be placed upon increasing the student’s skills in critically analyzing education settings for young children. Special attention will be given to both indoor and outdoor environments, selection and storage of materials, appropriate application of local, state and national safety requirements. Note: Within the first two weeks of class students using this course for the Specialization requirement for the California Child Development Permit must inform the instructor of their intention and class assignments will be focused appropriately. Students will receive a letter of verification of Specialization upon successful completion of this course.

ECE 14  SCHOOL AGE AND ADOLESCENT DEVELOPMENT - 3 Units (S)
Class Hours: 54 lecture total
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.

ECE 15  HEALTH AND SAFETY IN CHILDREN'S PROGRAMS - 3 Units (S)
Class Hours: 54 lecture total
Provides an opportunity for teachers and child care workers to focus on the broad dimension of health and safety in children’s programs. Fundamentals of a safe environment, including knowledge of state and local regulations, will be covered. Illness and disease, identification, prevention, and care, and nutritional needs awareness will be explored. Health and safety community resources and their application to the children’s curriculum will also be highlighted.
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Class Hours</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 16</td>
<td>FUNDAMENTALS OF EARLY CHILDHOOD MENTORING AND SUPERVISION</td>
<td>2</td>
<td>A grade of C or higher in ECE 7</td>
<td>36 lecture</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>ECE 20</td>
<td>E.C. CURRICULUM: INTRODUCTION TO CURRICULUM</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>This course introduces the student to developmentally-based curriculum for young children in early care and learning settings. The course includes a rationale for organizing and implementing daily, monthly, and long-range activity planning. Students will acquire an understanding of the philosophies and strategies for developing and documenting integrated curricula for early childhood programs. This course may be offered in a distance learning format.</td>
</tr>
<tr>
<td>ECE 22</td>
<td>E.C. CURRICULUM: INFANT/TODDLER CARE</td>
<td>1</td>
<td></td>
<td>18 lecture</td>
<td></td>
<td>A course focusing on the planning, preparation and presentation of developmentally appropriate curriculum activities and materials for use with infants and toddlers to support physical, social-emotional, cognitive and language development.</td>
</tr>
<tr>
<td>ECE 24</td>
<td>E.C. CURRICULUM: SCHOOL AGE CARE</td>
<td>1</td>
<td></td>
<td>18 lecture</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>ECE 30</td>
<td>E.C. CURRICULUM: PHYSICAL DEVELOPMENT</td>
<td>3</td>
<td>A grade of C or higher in ECE 20</td>
<td>54 lecture</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>ECE 40</td>
<td>E.C. CURRICULUM: AFFECTIVE DEVELOPMENT</td>
<td>3</td>
<td>A grade of C or higher in ECE 20</td>
<td>54 lecture</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>ECE 50</td>
<td>E.C. CURRICULUM: COGNITIVE DEVELOPMENT</td>
<td>3</td>
<td>A grade of C or higher in ECE 20</td>
<td>54 lecture</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>ECE 51</td>
<td>EARLY CHILDHOOD STAFFING AND MANAGEMENT</td>
<td>3</td>
<td></td>
<td>54 lecture</td>
<td></td>
<td>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 learning format.</td>
</tr>
<tr>
<td>ECE 52</td>
<td>GUIDANCE IN ADULT-CHILD RELATIONS</td>
<td>3</td>
<td></td>
<td>54 lecture</td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

*"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.*
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>CR/NC/Option</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1A</td>
<td>PRINCIPLES OF ECONOMICS (MICRO) (CAN# ECON 4)</td>
<td>3</td>
<td>CR/NC Option</td>
<td>A grade of C or higher in ENGL 280, or English Placement Level 5 or higher (ECON 1A is not a prerequisite for ECON 1B)</td>
</tr>
<tr>
<td>ECON 1B</td>
<td>PRINCIPLES OF ECONOMICS (MACRO) (CAN# ECON 2)</td>
<td>3</td>
<td>CR/NC Option</td>
<td>A grade of C or higher in ENGL 280, or English Placement Level 5 or higher (ECON 1A is not a prerequisite for ECON 1B)</td>
</tr>
<tr>
<td>ECON 2</td>
<td>ECONOMIC ISSUES AND POLICIES (I)</td>
<td>3</td>
<td>CR/NC Option</td>
<td>A grade of C or higher in ENGL 280, or English Placement Level 5 or higher</td>
</tr>
<tr>
<td>ECON 17</td>
<td>ECONOMIC HISTORY OF THE UNITED STATES – 3 Units</td>
<td>3</td>
<td>CR/NC Option</td>
<td>Combined with POLS 2, ECON 17 satisfies the CSU requirement in US History, Constitution, and American ideals</td>
</tr>
</tbody>
</table>

**ECE 94**  EARLY CHILDHOOD EDUCATION WORKSITE LEARNING - 1-4 Units

Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.

**Note:** During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)

**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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

**ECE 152**  THE YOUNG CHILD: MOVEMENT, RHYTHM, AND SINGING (formerly ECE 152A) - 1 Unit (I)

**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 (formerly ECE 152F) - 1 Unit (I)

**Class Hours:** 18 lecture total

This course will introduce the student to the teaching and theory of Dr. Maria Montessori. This method of preparing a preschool environment, which promotes independence in the young child, will be presented through lectures and demonstrations.

**ECE 197**  SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION - .5-2 Units (CR/NC Option)

**Class Hours:** 9-36 lecture total

This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in early childhood education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. **Note:** Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

**ECONOMICS (ECON)**

**ECON 1A**  PRINCIPLES OF ECONOMICS (MICRO) - 3 Units (CR/NC Option) (CAN# ECON 4) (F/S)

**Advisory:** A grade of C or higher in ENGL 280, or English Placement Level 5 or higher (ECON 1A is not a prerequisite for ECON 1B)

**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course is a study of the basic institutions and principles of microeconomics and so it concentrates on the parts of an economic system: the markets, the producers, the consumers and the structures of basic industries along with systems for relative resource use and income determination. This course may be offered in a distance learning format.

**ECON 1B**  PRINCIPLES OF ECONOMICS (MACRO) - 3 Units (CR/NC Option) (CAN# ECON 2) (F/S)

**Advisory:** A grade of C or higher in ENGL 280, or English Placement Level 5 or higher (ECON 1A is not a prerequisite for ECON 1B)

**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course studies the basic economic institutions and principles as they pertain to the entire economic system such as money and banking, determinants of national income, employment, output and the roles played by government in using monetary and fiscal policy to promote the mandates of the Employment Act of 1946. This course may be offered in a distance learning format.

**ECON 2**  ECONOMIC ISSUES AND POLICIES - 3 Units (CR/NC Option) (I)

**Advisory:** A grade of C or higher in ENGL 280, or English Placement Level 5 or higher

**Class Hours:** 54 lecture total

This course approaches the study of economics not from the standpoint of theory and principle but through the investigation of problems. The purpose is to identify cause(s) and to construct solutions while being mindful of the philosophies, values, and attitudes involved. This course is designed specifically for those not required to take ECON 1A-1B.

**ECON 17**  ECONOMIC HISTORY OF THE UNITED STATES – 3 Units (CR/NC Option) (F/S)

**Advisory:** A grade of C or higher in ENGL 280, or English Placement Level 5 or higher

**Note:** Combined with POLS 2, ECON 17 satisfies the CSU requirement in US History, Constitution, and American ideals

**Class Hours:** 54 lecture total

This survey course combines the approaches of the economist and of the historian for an alternative investigation into the origins and into the evolution of the United States. For events, movements and trends seemingly non-economic in nature, this course will identify and analyze the often hidden economic components. For events, movements and trends considered mainly economic in nature, other aspects such as social and political components will be identified, analyzed and synthesized with the economic for a more complete historical investigation.
EDUC 1  INTRODUCTION TO TEACHING - 3 Units (I)
Class Hours: 54 lecture total
For prospective teachers, paraprofessionals, tutors, classroom volunteers/mentors, and others interested in education, this introductory course focuses on contemporary education practices and theories. Topics include: educational history, organization, teacher-child relationships, teaching methods, school resources, staff relations, curriculum patterns, authority, and discipline in the schools.

EDUC 2  LITERACY AND LEARNING – 3 Units (F/S)
Class Hours: 54 lecture total
This course serves as a theoretical framework for prospective teachers, paraprofessionals, and continuing professional development regarding how humans acquire language and literacy skills from childhood through adulthood. It provides practical information for developing language and literacy in a pluralistic multi-cultural society, which will enhance first and second language and cognitive development. This course is useful preparation for CLAD credential requirements.

EDUC 7  BEHAVIOR MANAGEMENT IN EDUCATION – 2 Units (F)
Class Hours: 36 lecture total
Designed for prospective teachers, paraprofessionals, tutors, classroom volunteers/mentors, and others interested in education to work effectively with individual and small groups of students in today’s classroom. Topics include effective communication and behavior management strategies.

EDUC 8  ELEMENTARY EDUCATION CURRICULUM – 3 Units (S)
Class Hours: 54 lecture total
This course is designed to prepare elementary school educators with the knowledge and understanding to assist with the implementation of elementary curriculum. Topics will include an understanding of the California essential standards, and the use of specific grade level assessments to effectively address individual student needs.

EDUC 9  LEARNING MODALITIES FOR ELEMENTARY EDUCATION – 3 Units (S)
Class Hours: 54 lecture total
This course is designed for preparing prospective teachers, paraprofessionals, tutors, classroom volunteers/mentors, and others interested in education to gain knowledge and understanding of strategies to use in the remedial teaching of the California State Math Standards. Topics include: understanding core mathematical concepts, student multiple intelligences, student learning styles, and use of games and manipulatives to acquire mathematical skills as they relate to California essential standards.

EDUC 10  LAWS AND SERVICES FOR SPECIAL EDUCATION – 3 Units (F)
Class Hours: 54 lecture total
This course is designed to prepare prospective teachers, paraprofessionals, tutors, classroom volunteers/mentors, and others interested in education to work effectively with students identified as having special education needs. The course will cover the 13 handicapping conditions, how students qualify for special education services, and the laws and regulations that govern special education practices.

EDUC 94  EDUCATION WORKSITE LEARNING - .5-4 Units
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

EDUC 97  SPECIAL TOPICS IN EDUCATION - .5-3 Units (CR/NC Option)
Class Hours: 9-54 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

EDUC 197  SPECIAL TOPICS IN EDUCATION - .5-2 Units (CR/NC Option)
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year. Subject to change. Check the current class schedule.
EDTE 55  CLASSROOM EXPERIENCE I – READING – 1 Unit (F)
Corequisite: Student must be concurrently enrolled in EDUC 94
Class Hours: 18 lecture
EDTE 55 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 60  CLASSROOM EXPERIENCE II – READING – 1 Unit (S)
Corequisite: Student must be concurrently enrolled in EDUC 94
Class Hours: 18 lecture
EDTE 60 is designed to deepen awareness and knowledge regarding specific important aspects of the teaching profession, including in-depth examination of curriculum and assessment requirements specified in recent legislation, specific tests required for teacher certification, student teaching, specific education and content standards, lesson planning, and effective instructional strategies to promote learning. Classroom instruction is aligned with fieldwork so that prospective teachers acquire planned structured observations and experiences in K-8 classrooms that demonstrate exemplary practice as described in the California Standards for the Teaching Profession. Discussion sessions assist prospective teachers in making connections between college courses and instruction in elementary schools. Emphasis is upon application in the content area of math.

EDTE 65  MATH I CLASSROOM EXPERIENCE – 1 Unit (F)
Corequisite: Student must be concurrently enrolled in EDUC 94
Class Hours: 18 lecture
EDTE 65 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 CBEST, 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 70  MATH II CLASSROOM EXPERIENCE – 1 Unit (S)
Corequisite: Student must be concurrently enrolled in EDUC 94
Class Hours: 18 lecture
EDTE 70 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 special 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.

ELECTRONIC TECHNOLOGY (ELEC)

FOR A+ CERTIFICATION, PLEASE SEE CIS 90

ELEC 30  AC/DC CIRCUITS - 6 Units (F)
Corequisite: Students must be concurrently enrolled in, or have completed MATH 102 with a grade of C or higher, or have Math Placement Level 4 or higher
Note: Students will be required to provide a calculator, DMM and basic tools.
Class Hours: 72 lecture/108 lab total
Alternating and direct current circuits are studied using Ohm’s Law, power laws, Thevenin’s Theorem, and Mesh Analysis. The course will also study resistor color codes, resistive circuit analysis capacitance, inductance, reactance, impedance, R-C time constants, magnetism, generation of a wave, resonance, Phasors, instrumentation and electronic simulations as they apply to AC/DC circuits.

ELEC 31  SOLID STATE DEVICES - 4 Units (I)
Prerequisite: A grade of C or higher in ELEC 30
Class Hours: 54 lecture/54 lab total
This class is a study of the characteristics, applications, and simulation of semiconductor devices and circuits. Devices covered are diodes, zener diodes, bipolar transistors, junction field effect transistors, and silicon-controlled rectifiers. Topics include rectification, power supplies, AC/DC load lines, biasing techniques, equivalents circuits, single and multi-stage amplifiers, and feedback application in power supplies and amplifiers. This class introduces the concept of device models and the use of electronic simulation.
ELEC 32  DIGITAL COMPUTER ELECTRONICS - 3 Units (CR/NC Option) (I)
Prerequisite: A grade of C or higher in ELEC 30
Class Hours: 36 lecture/54 lab total
Numbering systems, binary arithmetic, basic gates, Karnaugh mapping, bubble convention, adders, shift registers, multiplexers, counters, 555 timers, truth tables, and flip-flops are studied. The lab experience is rich in applications and hands-on experiments. Electronic workbench software is available for student use.

ELEC 33  MICROPROCESSOR TECHNOLOGY - 3 Units (I)
Prerequisite: A grade of C or higher in ELEC 32
Class Hours: 36 lecture/54 lab total
A continuation of digital electronics beginning with a review of computer systems and architectures. A complete system analysis of the 8086 Intel microprocessor is performed. Chip level analysis of 8086-based microprocessor systems, computer interfacing, assembly language programming, and microprocessor troubleshooting are key topics covered. Structured programming techniques, flow charts, stack usage, interrupts, bus structures, common interface chips, and other related topics are covered.

ELEC 35  ELECTRONIC CIRCUITS AND DEVICES I - 4 Units (I)
Prerequisite: A grade of C or higher in ELEC 31
Class Hours: 54 lecture/54 lab total
Transistor physics, mathematical and graphical techniques are utilized to study D-C multistage amplifiers and power amplifiers. The Miller Effect is applied to the study of amplifier frequency response. In addition, the student will write a resume and give an oral, technical presentation.

ELEC 37  DIGITAL SYSTEMS - 4 Units (I)
Prerequisite: A grade of C or higher in ELEC 33
Class Hours: 54 lecture/54 lab total
A continuation of ELEC 33 beginning with a review of the computer architecture and an overview of the IBM PC. Chip level analysis of DMA transfers, PC bus interfacing, communication protocols, CRT displays, floppy and hard disk drive technologies are discussed. Design of hardware circuits to interface microprocessors with industrial equipment and input/output transducers for control systems are also studied. Logical troubleshooting techniques of these microcomputer systems and peripheral equipment are analyzed using low level programming techniques in assembly and "C" languages.

ELEC 39  ELECTRONIC CIRCUITS AND DEVICES II - 3 Units (I)
Prerequisite: A grade of C or higher in ELEC 35
Class Hours: 36 lecture/54 lab total
This course will cover transistor physics, graphical techniques, computer simulation and mathematical analysis. Subjects studied will include regulated power supplies, VMOS transistors, switching power supplies, and other selected topics in the analog design field.

ELEC 94  ELECTRONICS WORKSITE LEARNING – 1-4 Units (I)
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ELEC 97  SPECIAL TOPICS IN ELECTRONICS - .5-2 Units (CR/NC Option) (I)
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 electronics. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes.
Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

ELEC 98  SPECIAL LAB TOPICS IN ELECTRONICS - .5-2 Units (CR/NC Option) (I)
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics in electronics. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes.
Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.
ELEC 128  COMPUTER-ASSISTED CIRCUIT DESIGN - 3 Units (I)
Advisory: A grade of C or higher in ELEC 30 or a grade of C or higher in ENGR 29
Class Hours: 36 lecture/54 lab total
Designed for Computer Electronic A.A. Degree program students, Computer Repair students, as well as Drafting
students who wish to be introduced to computer-aided circuit design techniques. Computer circuit simulation and
analysis, computer-aided drawing techniques, computer-aided printed circuit board development, fabrication and
assembly techniques and computer-aided data acquisition and analysis methods are studied. Electronic drafting
procedures as well as non-destructive soldering techniques are also introduced.

ELEC 136  TELECOMMUNICATION TECHNOLOGY - 2 Units (I)
Prerequisite: A grade of C or higher in ELEC 31
Class Hours: 36 lecture total
This course provides an introduction to the general field of electronic communication. The fundamentals of
telecommunication systems are introduced by analyzing the various methods of transmitting data from one location to
another using both wireless and wired networks. Wireless topics include noise analysis, modulation and demodulation
techniques, antennas, receiver detection and signal to noise (S/N) ratio calculations. Wired communication topics
include transmission lines, digital coding techniques, security considerations, error detection/correction, and large scale
digital telephonic systems.

ELEC 138  FUNDAMENTALS OF ELECTRONICS AND ELECTRICITY (formerly ELEC 138/139) - 4 Units (I)
Advisory: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher, and a grade of C or higher in ENGL
270 or English Placement Level 4 or higher
Class Hours: 54 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.

ELEC 197  SPECIAL TOPICS IN ELECTRONICS - .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in
the field of electronics. A different topic will be addressed each time the class is taught and will be listed in the schedule
of classes. Recommended for electronics majors; open to anyone with an interest in the topic. Note: The course may
be repeated three times for a total of four enrollments.

ENGINEERING (ENGR)

ENGR 1A  MEASUREMENTS AND PLANE SURVEYING - 3 Units (F)
Prerequisite: A grade of C or higher in MATH 10 or Math Placement Level 5 or higher
Class Hours: 36 lecture/54 lab total
Surveying fundamentals including the use and care of surveying instruments such as engineers' level, transits, and
theodolite. Applications include survey procedures, vertical and horizontal measurements, traverses, layout, and survey
calculations. Additional topics include legal descriptions, public land surveying, advanced equipment, and GPS.

ENGR 1B  PLANE SURVEYING - 3 Units (S)
Prerequisite: A grade of C or higher in MATH 10 or Math Placement Level 5 or higher, and a grade of C or higher in ENGR 1A
Class Hours: 36 lecture/54 lab total
Application of plane surveying principles to control surveys, field astronomy, route and construction surveys and property
surveys. Introduction to advanced survey equipment and related systems.

ENGR 2  CAREER PLANNING FOR ENGINEERING & ENGINEERING TECHNOLOGY - 1 Unit (CR/NC Option) (F)
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 (CAN # ENGR 6) (I)
Prerequisite: A grade of C or higher in MATH 4A, and a grade of C or higher in PHYS 4B
Corequisite: Students must be concurrently enrolled in, or have completed MATH 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 Karnaugh mapping.

ENGR 20  RESIDENTIAL DESIGN (formerly ENGR 21A) - 2 Units (I)
Corequisite: Students must be concurrently enrolled in, or have completed ENGR 120 with a grade of C or higher.
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher; and a grade of C or higher in
MATH 220 or Math Placement Level 1 or higher
Class Hours: 18 lecture/54 lab total
The study of residential design including non-traditional structures and their application to single family dwellings. Topics
included are costs, architectural styling, site consideration, room design and orientation, and preliminary drawings. The
student designs one dwelling and develops the preliminary drawings for basic CAD for completion in the succeeding
course, ENGR 21.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Prerequisite</th>
<th>Corequisite</th>
<th>Class Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 21</td>
<td>ARCHITECTURAL DRAWING (formerly ENGR 21B)</td>
<td>3</td>
<td>I</td>
<td>A grade of C or higher in ENGR 20</td>
<td>Students must be concurrently enrolled in, or have completed ENGR 29 with a grade of C or higher.</td>
<td>36 lecture/54 lab total</td>
<td>The student develops a complete set of residential drawings of a residence from preliminary drawings approved by the instructor. The emphasis is in drafting techniques, residential structural calculations, dimensioning, use of building codes, sections, details, etc. The drawings will be developed in CAD.</td>
</tr>
<tr>
<td>ENGR 22</td>
<td>ENGINEERING GRAPHICS</td>
<td>2</td>
<td>F</td>
<td>A grade of C or higher in ENGR 120</td>
<td></td>
<td>18 lecture/54 lab total</td>
<td>A study of the principles and techniques of technical drafting. Teaches graphics as related to engineering design and problem-solving. Satisfies graphics requirement for engineering.</td>
</tr>
<tr>
<td>ENGR 24</td>
<td>DESCRIPTIVE GEOMETRY</td>
<td>2</td>
<td>S</td>
<td>A grade of C or higher in ENGR 22</td>
<td></td>
<td>18 lecture/54 lab total</td>
<td>A study of graphic analysis and the solution of three-dimensional space problems through the application of the principles of multi-view projection. Fundamental problems are related to points, lines, planes, intersections and revolutions. Satisfies the graphics requirement for engineering at most universities.</td>
</tr>
<tr>
<td>ENGR 25</td>
<td>STRUCTURAL DRAFTING</td>
<td>3</td>
<td>I</td>
<td>A grade of C or higher in each of the following courses: ENGR 22, ENGR 29, and ENGR 36</td>
<td></td>
<td>36 lecture/54 lab total</td>
<td>Advanced drafting with structural drafting as the specialty focus, preparing drafters for industry. Includes reference and standards research, graphic and mathematical analysis and engineering notes. Primarily structural steel design and detailing plus reinforced concrete detailing.</td>
</tr>
<tr>
<td>ENGR 26</td>
<td>INDUSTRIAL DRAFTING</td>
<td>4</td>
<td>S</td>
<td>A grade of C or higher in ENGR 22 and a grade of C or higher in ENGR 29</td>
<td></td>
<td>36 lecture/108 lab total</td>
<td>The advanced study and application of industrial design and drafting strategies, techniques, and standards. Prepares the drafting technician for employment in industry. Includes advanced topics in tooling jigs and fixtures, welding, graphic layout, piping, fasteners, reference data, casting design, gears and bearings, precision geometric dimensioning and tolerancing, and American Society of Mechanical Engineers (ASME) and ANSI drafting standards, document management, and checking procedures. Both manual and CAD techniques and strategies are covered. The course places emphasis on group organization and team work.</td>
</tr>
<tr>
<td>ENGR 27</td>
<td>MAP AND COMPUTER-AIDED DRAFTING</td>
<td>3</td>
<td>I</td>
<td>A grade of C or higher in ENGR 1A</td>
<td></td>
<td>36 lecture/54 lab total</td>
<td>Teaches the use of the computer and surveying software to produce maps. Includes input and processing of field data, cogo, digital terrain modeling and contours, subdivisions, roads, and deed descriptions.</td>
</tr>
<tr>
<td>ENGR 29</td>
<td>COMPUTER-AIDED DRAFTING (CAD)</td>
<td>2</td>
<td>F/S</td>
<td>A grade of C or higher in ENGL 280, or English Placement Level 5 or higher; and a grade of C or higher in MATH 220, or Math Placement Level 1 or higher</td>
<td>Students must be concurrently enrolled in, or have completed ENGR 120 or ENGR 22 with a grade of C or higher</td>
<td>18 lecture/54 lab total (when offered in the Distance Education format, hours will total 108)</td>
<td>A course with Basic AutoCAD as a tool for more 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 data base drawings. The emphasis is on graphics with engineering applications. The equivalent of this course in content and objectives may also be offered on the Internet.</td>
</tr>
<tr>
<td>ENGR 30</td>
<td>INTERMEDIATE COMPUTER-AIDED DRAFTING</td>
<td>2</td>
<td>S</td>
<td>A grade of C or higher in ENGR 29</td>
<td></td>
<td>18 lecture/54 lab total</td>
<td>An intermediate course with AutoCAD for drafting and design. This course builds on basic 2D CAD, develops management systems, and covers 3D CAD through solid modeling.</td>
</tr>
<tr>
<td>ENGR 31</td>
<td>ARCHITECTURAL APPLICATIONS FOR CAD</td>
<td>2</td>
<td>I</td>
<td>A grade of C or higher in ENGR 29</td>
<td></td>
<td>18 lecture/54 lab total</td>
<td>Continued study of CAD as it pertains to architectural applications. Including two-dimensional and three-dimensional concepts as they relate to site, elevations, floor, foundation, roof, mechanical, electrical and sectional-detail construction documents.</td>
</tr>
</tbody>
</table>

*“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year. Subject to change. Check the current class schedule.*
ENGR 32  ADVANCED CIVIL DESIGN APPLICATIONS FOR CAD - 3 Units  (I)
Prerequisite: A grade of C or higher in ENGR 27
Class Hours: 36 lecture/54 lab total
Further the students' knowledge obtained in ENGR 27 in order to be better prepared as an engineering/drafting technician in a civil engineering office. The course covers the 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 (formerly ENGR 30C) - 2 Units  (I)
Prerequisite: A grade of C or higher in ENGR 29
Class Hours: 18 lecture/54 lab total
An advanced computer-aided drafting course using Mechanical Desktop and/or Inventor, 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. It will advance drafting skills to solve design problems and to present solutions for production or engineering processes, and to visually communicate that solution.

ENGR 35  STATISTICS - 3 Units  (CAN# ENGR 8)  (F)
Prerequisite: A grade of C or higher in PHYS 4A
Corequisite: Students must be concurrently enrolled in, or have completed MATH 4A with a grade of C or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher. Previous drafting experience is helpful
Class Hours: 54 lecture total
A course in the study of the mechanics of equilibrium of force systems acting on engineering structures. Topics include equivalent force couple systems, equilibrium, truss analysis, multi-force member analysis, centroids, distributed forces, beam stress and strain diagrams, friction, cables, moments and products of inertia, and virtual work. This course is usually followed by a course in dynamics, offered at the university upper-division level.

ENGR 36  STATICS/STRENGTH OF MATERIALS FOR ENGINEERING TECHNICIANS - 3 Units  (F)
Prerequisite: A grade of C or higher in MATH 10, or Math Placement Level 5 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
This course analyzes the external and internal forces induced in structures and machines by various types of loading. Basic concepts in the area of properties of materials are discussed. This course does not meet the requirements for transfer in the bachelors level engineering curriculum.

ENGR 45  PROPERTIES OF MATERIALS - 3 Units  (CAN# ENGR 4)  (I)
Prerequisite: A grade of C or higher in PHYS 4A
Class Hours: 36 lecture/54 lab total
Study of atomic and crystal structures of metallic materials and their physical, mechanical and chemical properties, and the application of basic principles to the selection and use of engineering materials.

ENGR 64  ENGINEERING MATERIAL TESTING - 3 Units  (F)
Prerequisite: A grade of C or higher in ENGL 270 or English Placement Level 6 or higher, and a grade of C or higher in MATH 220 or Math Placement Level 1 or higher
Class Hours: 36 lecture/54 lab total
This 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 - 1-4 Units
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ENGR 97  SPECIAL TOPICS IN ENGINEERING - .5-2 Units  (CR/NC Option)  (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in engineering. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Since subject matter varies each time the course is taught, this course is repeatable 3 times for a total of 4 enrollments.
<table>
<thead>
<tr>
<th>Subject</th>
<th>Title</th>
<th>Units</th>
<th>Option</th>
<th>Credit/No Credit</th>
<th>Offered</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 98</td>
<td>SPECIAL LAB TOPICS IN ENGINEERING</td>
<td>.5-2</td>
<td>(CR/NC Option)</td>
<td>(I)</td>
<td>Class Hours: 27-108 lab total</td>
<td>This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in engineering. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.</td>
</tr>
<tr>
<td>ENGR 118</td>
<td>BLUEPRINT AND SPECIFICATION READING (MECHANICAL)</td>
<td>2</td>
<td>(CR/NC Option)</td>
<td>(F)</td>
<td>Class Hours: 36 lecture total</td>
<td>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.</td>
</tr>
<tr>
<td>ENGR 119</td>
<td>BLUEPRINT AND SPECIFICATION READING (ARCHITECTURAL)</td>
<td>2</td>
<td>(CR/NC Option)</td>
<td>(F)</td>
<td>Class Hours: 36 lecture total</td>
<td>Designed to provide the student who expects to enter a skilled trade with a working knowledge of architectural and construction drawings and specifications and basic communication skills that will be needed for employment.</td>
</tr>
<tr>
<td>ENGR 120</td>
<td>INTRODUCTION TO ENGINEER ING GRAPHICS</td>
<td>2</td>
<td>(F/S)</td>
<td>Class Hours: 18 lecture/54 lab total</td>
<td>Teaches the most basic fundamentals of engineering graphics. Designed for CAD, architecture, and civil technology majors, and for any student desiring an introduction to this system of technical communication called drafting. The course provides a basic but useful ability with technical CAD drafting.</td>
<td></td>
</tr>
<tr>
<td>ENGR 197</td>
<td>SPECIAL TOPICS IN ENGINEERING</td>
<td>.5-2</td>
<td>(CR/NC Option)</td>
<td>(I)</td>
<td>Class Hours: 9-36 lecture total</td>
<td>This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of engineering. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for engineering majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.</td>
</tr>
<tr>
<td>ENGR 198</td>
<td>SPECIAL LAB TOPICS IN ENGINEERING</td>
<td>.5-2</td>
<td>(CR/NC Option)</td>
<td>(I)</td>
<td>Class Hours: 27-108 lab total</td>
<td>This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of engineering. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for engineering majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Title</th>
<th>Units</th>
<th>Option</th>
<th>Credit/No Credit</th>
<th>Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A</td>
<td>READING AND COMPOSITION</td>
<td>4</td>
<td>(CAN# ENGL 2)</td>
<td>(ENGL SEQ A)</td>
<td>(F/S)</td>
</tr>
<tr>
<td>ENGL 1B</td>
<td>LITERATURE AND COMPOSITION</td>
<td>3</td>
<td>(CAN# ENGL 4)</td>
<td>(ENGL SEQ A)</td>
<td>(F/S)</td>
</tr>
</tbody>
</table>

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year. Subject to change. Check the current class schedule.
ENGL 1C  CRITICAL REASONING, READING, AND WRITING - 3 Units (F/S)
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Course focuses on critical thinking skills, close textual analysis, and expository and argumentative writing. Students apply critical thinking skills in reading non-fiction and fiction, and in writing essays of definition, cause/effect analysis, argumentation, refutation, and advocacy. Students will learn to use research strategies in analyzing others' ideas and supporting their own. This course may be offered in a distance learning format.

ENGL 10A  WORLD LITERATURE (to 1500) - 3 Units (CR/NC Option) (F/S/I)
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course introduces students to some representative masterpieces in world literature beginning with the ancient world and continuing to 1500. A majority of the works will be selected from non-Western literary traditions. The course involves critical analysis of these works within the context of the culture and time in which they were written. Emphasis centers on identifying and analyzing important themes that shape and define the human experience. This course may be offered in a distance learning format.

ENGL 10B  WORLD LITERATURE (after 1500) - 3 Units (CR/NC Option) (F/S/I)
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course introduces students to some representative masterpieces in world literature beginning with 1500 and continuing to the present. A majority of the works will be selected from non-Western literary traditions. The course involves critical analysis of these works within the context of the culture and time in which they were written. Emphasis centers on identifying and analyzing important themes that shape and define the human experience. ENGL 10A is not a prerequisite to ENGL 10B. This course may be offered in a distance learning format.

ENGL 11A  A SURVEY OF AMERICAN LITERATURE- Pre-Colonial to 1860 - 3 Units (CR/NC Option) (CAN #ENGL 14) (CAN# ENGL SEQ C) (F/I)
Prerequisite: A grade of C or higher in ENGL 1A, or an English Placement Level 7
Class Hours: 54 lecture total
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.

ENGL 11B  A SURVEY OF AMERICAN LITERATURE-1860 to Present - 3 Units (CR/NC Option) (CAN #ENGL 16) (CAN# ENGL SEQ C) (S/I)
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total
This course involves a study of representative authors in the literary history of the United States from the Civil War to the present day.

ENGL 12  INTRODUCTION TO SHORT FICTION - 3 Units (CR/NC Option) (I)
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introduction to the genre of the short story in English and translation, including the elements of the form: structure, narration, point of view, setting, character, plot, and metaphorical language. This course may be offered in a distance learning format.

ENGL 13A  A SURVEY OF ENGLISH LITERATURE (Old English Period through Neoclassicism) - 3 Units (CR/NC Option) (CAN ENGL 8) (CAN# ENGL SEQ B) (F/I)
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
ENGL 13A is the first semester of the basic two-semester English Literature survey course commonly offered in the sophomore year at colleges and universities. It involves the intensive study of and reading and writing upon representative masterpieces of the literary history of England from the Anglo-Saxon period to the end of the 18th century. This course may be offered in a distance learning format.

ENGL 13B  A SURVEY OF ENGLISH LITERATURE (from the Romantic Period to Present) - 3 Units (CR/NC Option) (CAN# ENGL 10) (CAN# ENGL SEQ B) (S/I)
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
ENGL 13B is the second part of the basic two-semester English Literature survey course, commonly offered in the sophomore year at colleges and universities. It involves the intensive study of and reading and writing upon representative masterpieces of the literary history of England from the Romantic Period to the present. This course may be offered in a distance learning format.

ENGL 14  A SURVEY OF DRAMA AS LITERATURE - 3 Units (CR/NC Option) (F/S/I)
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A course designed to provide the student with an awareness of the origin and development of Western drama through an examination of representative plays from classical Greece to the present. Aesthetic values as well as social, political, and psychological implications expressed through the drama will be examined in order to enhance the student's understanding and appreciation of dramatic literature; therefore, students will be required to watch as well as read plays which are representative of the various movements in Western civilization. This course may be offered in a distance learning format.
ENGL 15  INTRODUCTION TO LITERATURE BY AND ABOUT WOMEN - 3 Units (F/S/I)
Prerequisite:  A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours:  54 lecture total (when offered in the Distance Education format, hours will total 162)
A survey of literature by and about women in different periods and countries. Genres studies include stories, diaries and letters, poetry and drama. Emphasis is on the human condition, especially among woman, as expressed in literature. This course may be offered in a distance learning format.

ENGL 16  POETRY - 3 Units (CR/NC Option) (I)
Prerequisite:  A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours:  54 lecture total (when offered in the Distance Education format, hours will total 162)
An intensive course analyzing the techniques and forms of poetry in English with stress on the genre. Interpretation and appreciation are the primary goals. Emphasis is on extensive reading for pleasure, various types of writing including analytical, responsive and experiential, as well as group experiences in listening. In addition, this course seeks to equip the college literature student to understand literary materials in a new way. The course includes a number of written exercises. This course may be offered in a distance learning format.

ENGL 17  INTRODUCTION TO SHAKESPEARE - 3 Units (CR/NC Option) (I)
Prerequisite:  A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours:  54 lecture total (when offered in the Distance Education format, hours will total 162)
This course offers an introduction to the representative works by Shakespeare including the characteristics of the different genres such as comedy, history, and tragedy as well as a study of the sonnets. A particular focus on theatre history and the historical and sociological influences of the Elizabethan/Jacobean era will highlight the study of the dramatic and literary conventions. This course may be offered in a distance learning format.

ENGL 18  AFRICAN AMERICAN LITERATURE - 3 Units (CR/NC Option) (F)
Advisory:  A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours:  54 lecture total
This course is primarily a genre study of African American Literature from the colonial period to the present – including oral tradition, poetry, slave narratives, essays, short stories, plays, novels, and music. Included is an examination of the historical, cultural and social forces influencing these works.

ENGL 19  A SURVEY OF THE BIBLE AS LITERATURE - 3 Units (CR/NC Option) (F/I)
Prerequisite:  A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours:  54 lecture total
A course designed to provide the student with an understanding of the origin and development of the Bible canon and its rendering into English. Major Bible books will be examined from the perspectives of content, form, and scholarly criticism.

ENGL 24  MULTICULTURAL PERSPECTIVES IN AMERICAN LITERATURE – 3 Units (CR/NC Option) (F)
Advisory:  A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours:  54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is an introduction to multiethnic literary currents in American literature and will focus on two or more of the following American cultures: African-American, Asian/Pacific Islander, Hispanic-American, and Native-American groups as well as other groups, including women. Mainstream literary works will also be examined. 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 background and political/cultural/historical context of the literature. Critical and analytical thinking, reading, and writing skills are stressed. Students from all backgrounds should benefit from the unique insights into American life afforded by this rich and varied tradition. This course may be offered in a distance learning format.

ENGL 25  LINGUISTICS - 3 Units (CR/NC Option) (I)
Prerequisite:  A grade of C or higher in ENGL 1A, or English Placement Level 7
Advisory:  A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Class Hours:  54 lecture total (when offered in the Distance Education format, hours will total 162)
The emphasis of the course is to develop the student’s analytical abilities and to enhance understanding of the complexities of the medium through which we communicate, 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 learning format.

ENGL 31  CREATIVE WRITING - 3 Units (CR/NC Option) (CAN # ENGL 6) (F/S)
Advisory:  A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours:  54 lecture total (when offered in the Distance Education format, hours will total 162)
The 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 learning format.

ENGL 33  FICTION AND FILM – 3 Units (CR/NC Option) (I)
Prerequisite:  A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours:  54 lecture total
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.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.
### ENGL 36  CHILDREN’S LITERATURE - 3 Units (CR/NC Option) (I)
**Prerequisite:** A grade of C or higher in ENGL 1A or English Placement Level 7  
**Class Hours:** 54 lecture total *(when offered in the Distance Education format, hours will total 162)*  
This course provides an overview of the origins and developments of children’s literature and acquaints the student with literature written for and read by children. In addition to exploring ways of promoting children’s development through literature, discussion of critical and theoretical approaches to children’s literature will be emphasized. This course may be offered in a distance learning format.

### ENGL 61  CRITICAL READING - 3 Units (F/S)
**Prerequisite:** A grade of C or higher in ENGL 190, or English Placement Level 6 or higher  
**Class Hours:** 54 lecture total  
The overall emphasis is to ensure reading adequacy that will enable the transfer student to succeed in upper-division academic work at any college or university. This course provides training in assessment and test taking skills, reading speed with comprehension, concentration, reading and study strategies, graphic illustrations, main idea, organizing text information, inference, point of view, critical thinking, and textbook study applications. The student will study and practice the academic skills necessary for success in most fields of study.

### ENGL 91  ADVANCED COMPOSITION - 3 Units (CR/NC Option) (S)
**Prerequisite:** A grade of C or higher in ENGL 1A, or English Placement Level 7  
**Class Hours:** 54 lecture total *(when offered in the Distance Education format, hours will total 162)*  
Advanced instruction and practice in effective writing, with intensive study of the established rhetorical principles. Emphasis is upon excellence in writing and the application of grammar to the improvement of writing. Intended primarily for students who are working toward an elementary teaching credential; meets state certification requirements for an advanced course in writing. This course may be offered in a distance learning format.

### ENGL 97  SPECIAL TOPICS IN ENGLISH - .5-2 Units (CR/NC Option) (I)
**Class Hours:** 9-36 lecture total  
This course is designed to give students an opportunity to explore a variety of topics and concepts not necessarily covered in other English courses. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Open to anyone with an interest in the topic. **Note:** Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

### ENGL 195  LITERARY MAGAZINE PRODUCTION- 2 Units (CR/NC Option) (F/S)
**Advisory:** A grade of C or higher in ENGL 280 or English Placement Level 5 or higher  
**Class Hours:** 36 lecture/18 lab total  
This course will show students how to read manuscripts critically to evaluate them for the literary magazine *Excalibur*. Students will practice constructive criticism of poetry, fiction, and non-fiction by writing comments that the authors may read. Selections will be discussed in a workshop setting and voted on anonymously. Students will contribute their own creative writing anonymously as well. Students will learn the steps in magazine production including publicity, manuscript preparation, and desktop publishing.

### BASIC SKILLS

#### ENGL 129  GRAMMAR REVIEW 1: CORRECT AND EFFECTIVE SENTENCES - 1.5 Units (CR/NC Option) (S)
**Class Hours:** 27 lecture total  
Emphasizes structure, variety, effectiveness and style of the English sentence. Includes methods of proofreading, the rules of punctuation, and techniques of revision. Includes comparison with sentence structure of other languages such as Spanish.

#### ENGL 161  EFFECTIVE READING – 2 Units (S)
**Prerequisite:** A grade of C or higher in ENGL 280, or English Placement Level 4 or higher  
**Class Hours:** 36 lecture total  
The course is designed to provide training in AA degree level reading skills. This class will focus on increasing reading speed and comprehension. Instruction and practice will be provided for developing effective study skills, efficient and analytical reading skills, vocabulary improvement, the ability to identify the main idea, determining supporting details and organizational patterns, knowledge of textbook learning, test-taking strategies, and critical thinking. The course includes skills training for standardized admission tests such as SAT/ACT and ASVAB, with emphasis on reading comprehension, analogies, sentence completion, math reading problems and basic writing skills.

#### ENGL 190  READING AND WRITING II - 4 Units (F/S)
**Prerequisite:** A grade of C or higher in ENGL 280, or English Placement Level 5 or higher  
**Class Hours:** 72 lecture total *(when offered in the Distance Education format, hours will total 216)*  
This course is designed to improve critical reading skills and to increase writing abilities so that students are able to produce organized, well-supported, and generally smoothly written short essays by the end of the semester. Emphasis is placed on both correctness and on writing as a process. This course may be offered in a distance learning format.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Class Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 191</td>
<td>WRITING IN THE WORKPLACE: GRAMMAR IN CONTEXT AND BASIC ESSAY STRUCTURE</td>
<td>2</td>
<td>A grade of C or higher in ENGL 280, or English Placement Level 5 or higher</td>
<td>36 lecture total</td>
<td>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 &quot;C&quot; or higher, this course can be used in combination with ENGL 192, ENGL 193 and/or ENGL 194 (for a total of four units) to meet the A.A. General Education Requirement and admit a student into ENGL 1A. The flexible scheduling of this course, along with its module approach, allows students more freedom in choosing both their schedules and their curriculum.</td>
</tr>
<tr>
<td>ENGL 192</td>
<td>WRITING IN THE WORKPLACE: NARRATION</td>
<td>1</td>
<td>A grade of C or higher in ENGL 191</td>
<td>18 lecture total</td>
<td>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 &quot;C&quot; or higher, this course can be used in combination with ENGL 191 and either ENGL 193 or ENGL 194 (for a total of four units) to meet the A.A. General Education Requirement and admit a student into ENGL 1A. The flexible scheduling of this course, along with its module approach, allows students more freedom in choosing both their schedules and their curriculum.</td>
</tr>
<tr>
<td>ENGL 193</td>
<td>WRITING IN THE WORKPLACE: PROCESS AND REPORT WRITING</td>
<td>1</td>
<td>A grade of C or higher in ENGL 191</td>
<td>18 lecture total</td>
<td>ENGL 193 is designed specifically for those students who have completed ENGL 191 and who desire direct applications of writing skills to the workplace environment with a special emphasis on process and report writing skills utilized in vocational fields. Emphasis will be on both correctness and the writing process. If passed with a grade of &quot;C&quot; or higher, this course can be used in combination with ENGL 191 and either ENGL 192 or ENGL 194 (for a total of four units) to meet the A.A. General Education Requirement and admit a student into ENGL 1A. The flexible scheduling of this course, along with its module approach, allows students more freedom in choosing both their schedules and their curriculum.</td>
</tr>
<tr>
<td>ENGL 194</td>
<td>WRITING IN THE WORKPLACE: COMPARISON/CONTRAST AND BASIC ARGUMENTATION</td>
<td>1</td>
<td>A grade of C or higher in ENGL 191</td>
<td>18 lecture total</td>
<td>ENGL 194 is designed specifically for those students who have completed ENGL 191 and who desire direct applications of writing skills to the workplace environment with a special emphasis on comparison/contrast and argumentative writing skills utilized in vocational fields. Emphasis will be on both correctness and the writing process. If passed with a grade of &quot;C&quot; or higher, this course can be used in combination with ENGL 191 and either ENGL 192 or ENGL 193 (for a total of four units) to meet the A.A. General Education Requirement and admit a student into ENGL 1A. The flexible scheduling of this course, along with its module approach, allows students more freedom in choosing both their schedules and their curriculum.</td>
</tr>
<tr>
<td>ENGL 248</td>
<td>BASIC READING</td>
<td>.5-1</td>
<td>A grade of “credit” in ENGL 248 (for native speakers) or ENGL 249 (for ESL students) or English Placement Level 1 or higher</td>
<td>36-72 lab total</td>
<td>A course designed to help students reading below the fourth grade level improve their reading skills. The course will provide one-on-one tutoring in basic reading skills including: symbol, sound and letter relationships; phonics; short and long vowel sounds; consonant blends; letter formation; basic capitalization and punctuation rules; reading for details; and sequencing. Based on individual assessments, programs of study will be written for each student. Independent work skills are necessary to complete the program. Note: This course may be repeated three times for a total of four enrollments since supervised repetition and practice may be required by some students to achieve full competency.</td>
</tr>
<tr>
<td>ENGL 250</td>
<td>ELEMENTS OF READING 250</td>
<td>1-3</td>
<td>A grade of &quot;credit&quot; in ENGL 248 or ENGL 249 (for ESL students) or English Placement Level 1 or higher</td>
<td>12-36 lecture/18-54 lab total</td>
<td>A course designed to help students improve their reading. Students will be evaluated in class to determine strong and weak skills areas. An individualized program will cover decoding, sight vocabulary, writing, and comprehension at the literal level. Materials used will be at the fourth and fifth grade levels. The student must be capable of working independently and in small groups. Enrollment in sequential courses is based on measurable progress. Note: This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.</td>
</tr>
<tr>
<td>ENGL 260</td>
<td>ELEMENTS OF READING 260</td>
<td>1-3</td>
<td>A grade of C or higher ENGL 250 or English Placement Level 2 or higher</td>
<td>12-36 lecture/18-54 lab total</td>
<td>A course constructed to help students enhance personal reading and work-related language skills. Students will be evaluated in class to determine strong and weak skill areas. An individualized program will include word attack strategies, word usage, clear writing with correct spelling and usage, critical thinking opportunities, and interpretive comprehension. Materials at the sixth, seventh, and eighth grade levels will be used. The student must be capable of working independently and in small groups. Enrollment in sequential courses is based on measurable progress. Note: This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.</td>
</tr>
</tbody>
</table>

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year. Subject to change. Check the current class schedule.
ENGL 270 ELEMENTS OF READING 270 - 1-3 Units (F/S)
Advisory: A grade of C or higher in ENGL 260 or English Placement Level 3 or higher
Class Hours: 12-36 lecture/18-54 lab total
A course intended to help vocational and transfer oriented students to augment academic reading and writing ability to successfully compete in college-level courses. Students will be evaluated in class to determine strong and weak skill areas. An individualized program will contain vocabulary nuance specific to academic disciplines, the capacity to write cogent, clear, precise prose with correct usage including grammar and spelling, plus comprehension focused on in-depth analysis and abstract reasoning. Materials at the ninth and tenth grade levels will be used. The student must be capable of working independently and in small groups. Enrollment in sequential courses is based on measurable progress. Note: This course may be repeated one time for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ENGL 280 READING AND WRITING I - 4 Units (F/S)
Prerequisite: A grade of C or higher in ENGL 270, or English Placement Level 4 or higher
Class Hours: 72 lecture total (This course may offered as partial Internet and hours will total 54 lecture and 54 Internet)
This course builds towards college-level reading and writing skills. The reading component emphasizes such skills as previewing, locating main ideas and supporting evidence, and drawing sound inferences. The writing component consists primarily of narrative, reading responses, and summaries. The course aims to increase reading and writing fluency, with some attention to correctness and the ability to develop ideas in an organized fashion in various kinds of writing. This course may be offered in a partial distance learning format.

ENGL 297 SPECIAL TOPICS IN READING - .5-3 Units (CR/NC Option) (I)
Class Hours: 9-54 lecture total
This course is designed to allow experimental approaches to helping students who need help in their reading and writing skills. Methods and content would not duplicate any existing courses. Note: Since subject matter varies each time the course is taught, the course is repeatable three times for a total of four enrollments.

ENGL 382 READING AND WRITING WORKSHOP - 0 Units (F/S)
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)

ENGLISH AS A SECOND LANGUAGE (ESL)

ENGLISH AS A SECOND LANGUAGE (ESL)

ESL 136 ORAL COMMUNICATION FOR COLLEGE SUCCESS – 4 Units (CR/NC Option) (F/S)
Advisory: A grade of C or higher in ESL 236 or ESL Placement Level 7 or higher
Class Hours: 72 lecture total
This is a course designed to assist non-native speakers of English build both fluency and accuracy in their listening and speaking skills. Activities integrating listening, speaking and pronunciation provide relevant practice necessary for business academics.

ESL 137 ESL COMPOSITION I – 6 Units (CR/NC Option) (F)
Advisory: A grade of C or higher in ESL 236 or ESL Placement Level 7 or higher
Class Hours: 90 lecture/54 lab total
This is an academic course for non-native speakers of English designed to develop writing fluency. Emphasis is on writing short compositions, developing process writing skills and learning common methods of organization. This course includes an intensive review of English grammatical patterns. Development of these skills enhances students’ fluency and proficiency in college-level writing.
ESL 138  COMPOSITION II – 6 Units (CR/NC Option) (S)
Advisory:  A grade of C or higher in ESL 137 or ESL Placement Level 8 or higher
Class Hours:  90 lecture/54 lab total
This is the second of two academic ESL writing courses designed to develop college level writing skills. Emphasis is on writing longer compositions including expository, analytic and argumentative essays. The course will also cover sentence structure as well as advanced grammatical patterns as they relate to refining writing skills.

ESL 220  ORAL COMMUNICATION (formerly ENGL 220) - 3 Units (CR/NC Option) (I)
Class Hours:  36 lecture/54 lab total
Designed for the upper beginner to upper intermediate student of English as a Second Language. Major emphasis will be on refining and expanding the listening and speaking skills, aural-oral coping skills, and oral critical thinking and expression skills, which are necessary to function in routine social interactions, beginning level jobs, and/or further academic work.

ESL 229  FAMILY LITERACY (formerly ENGL 229) - 2 Units (CR/NC Only) (I)
Class Hours:  108 lab total
ESL 229 will provide beginning level non-English speaking parents an opportunity to acquire English and English literacy skills while their children attend simultaneous language arts classes in an after school program, held at a local elementary school. A unique element of the Family Literacy class is that parents and children will participate together in developing literacy skills intermittently throughout the semester. The use of both the native language and English will be encouraged. Note: This course may be repeated 1 time for a total of 2 enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ESL 230  BEGINNING (formerly ENGL 230) - 4 Units (CR/NC Only) (F/S)
Class Hours:  18 lecture/198 lab total
A course designed for the absolute beginner with zero competency in English. This class introduces aural-oral communication. Note: This course may be repeated 1 time for a total of 2 enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ESL 231  BEGINNING MID (formerly ENGL 231) - 4 Units (CR/NC Only) (F/S)
Advisory:  A grade of “credit” in ESL 230, or qualifying score on ESL Assessment Exam
Class Hours:  18 lecture/198 lab total
This course stresses the development of oral language skills and basic vocabulary related to daily needs. Note: This course may be repeated 1 time for a total of 2 enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ESL 232  BEGINNING HIGH (formerly ENGL 232) - 4 Units (CR/NC Only) (F/S)
Advisory:  A grade of “credit” in ESL 231, or qualifying score on ESL Assessment Exam
Class Hours:  18 lecture/198 lab total
This course builds on the basic language skills from ESL 231. Language skills are expanded in communicative contexts. Emphasis is placed on development of “social English.” Note: This course may be repeated 1 time for a total of 2 enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ESL 233  INTERMEDIATE (formerly ENGL 233) - 4 Units (CR/NC Option) (F/S)
Advisory:  A grade of “credit” in ESL 232, or qualifying score on ESL Assessment Exam
Class Hours:  18 lecture/198 lab total
This course integrates basic language skills. Students at this level build the communicative ability to function in practical areas of daily life. Introduces cultural knowledge and intermediate grammatical structures. Note: This course may be repeated 1 time for a total of 2 enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ESL 234  INTERMEDIATE HIGH (formerly ENGL 234) - 4 Units (CR/NC Option) (F/S)
Advisory:  A grade of C or higher in ESL 233, or ESL Placement Level 4 or higher
Class Hours:  18 lecture/198 lab total
Intermediate grammatical structures are reinforced. Cultural competency is expanded. Students develop ability to speak with some degree of fluency and accuracy. Note: This course may be repeated 1 time for a total of 2 enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ESL 235  ADVANCED (formerly ENGL 235) - 5 Units (CR/NC Option) (F/S)
Advisory:  A grade of C or higher in ESL 234, or ESL Placement Level 5 or higher
Class Hours:  36 lecture/180 lab total
This course reviews and reinforces language skills learned in previous ESL levels. Students will expand their general ability to communicate in oral and written English beyond the familiar. Note: This course may be repeated 1 time for a total of 2 enrollments since course content varies and skills are enhanced by supervised repetition and practice.

ESL 236  ADVANCED HIGH (formerly ENGL 236) - 5 Units (CR/NC Option) (F/S)
Advisory:  A grade of C or higher in ESL 235, or ESL Placement Level 6 or higher
Class Hours:  54 lecture/126 lab total
Advanced High, ESL 136, will provide students the opportunity to refine and expand their knowledge of the various aspects of language so that upon completion of the course, students will be able to communicate orally and in writing with a greater degree of accuracy and fluency. The course will stress the development of reading and writing skills necessary to meet the needs of daily living as well as to set the basic foundation for further academic study. Note: This course may be repeated 1 time for a total of 2 enrollments since course content varies and skills are enhanced by supervised repetition and practice.

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ENVR 1  CAREER PLANNING FOR ENVIRONMENTAL RESOURCES - 2 Units (CR/NC Option) (F)
Class Hours: 36 lecture total
Career opportunities and requirements in Agriculture, Natural Resources and Ornamental Horticulture 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.

ENVR 9  AGRICULTURE AND NATURAL RESOURCES LEADERSHIP - 1 Unit (CR/NC Option) (F/S)
Note: Required field trips
Class Hours: 9 lecture/27 lab total
This course is designed to develop leadership qualities in students. "Hands-on" techniques will be used to facilitate problem solving, cooperative work ethics, developing initiative, managing and organizing information, flexible thinking and effective questioning. Practical experience in conducting business as a group will be gained by participation. Note: This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition.

ENVR 11  ENVIRONMENTAL ETHICS (formerly INTR 11) - 3 Units (F)
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 for all posterity. Sources of western society's historical and current attitudes toward nature as well as alternative cultural perspectives will be explored in this course in order to broaden student's range of choices of how to think and how to be with regards to nature. Students will emerge from this class with a greater understanding of their individual moral responsibilities toward the environment around them. This course may be offered in a distance learning format.

ENVR 24  SOILS - 3 Units (formerly AGRI 24) (CR/N/C Option) (CAN# AG-PS 28) (F/S)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher; and one year of high school chemistry or equivalent
Note: Class includes two Saturday field trips on classification, judging, and conservation of soils. This class is required for all agriculture, natural resources, and horticulture majors.
Class Hours: 36 lecture/54 lab total
This class is an introductory course on the physical, chemical, and biological properties of soil as related 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Prerequisite/Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 44</td>
<td>MECHANICAL TECHNOLOGY FOR ENVIRONMENTAL RESOURCES</td>
<td>3</td>
<td>(CAN# AG-MA 4) (F/S)</td>
<td>This course covers the mechanical technology related to agriculture, natural resources, and environmental horticulture. Subjects covered will be economic analysis of equipment management, design layout, and cost analysis of mechanical structures, and material analysis. Safety will be emphasized.</td>
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<tr>
<td>ENVR 47</td>
<td>PROJECT CONSTRUCTION FOR EQUIPMENT OPERATIONS (form. AGRI 47)</td>
<td>3</td>
<td>(CR/NC Option) (S)</td>
<td>Prerequisite: A grade of C or higher in CONS 46 and a grade of C or higher in CONS 48. Limitation on Enrollment: Student must produce a negative test result for substance abuse in accordance with Shasta College Student Substance Abuse Testing Policy at a student cost to be paid to the designated testing facility. Note: Students will not be allowed to operate road equipment without proper license and driving record. Class Hours: 27 lecture/81 lab total. This class teaches intermediate skill-level operation and maintenance of off-road and on-road heavy equipment. It also covers common project construction techniques utilizing heavy equipment with an emphasis on environmental concerns.</td>
</tr>
<tr>
<td>ENVR 52</td>
<td>COMPUTERS IN ENVIRONMENTAL RESOURCES (formerly AGRI 52)</td>
<td>3</td>
<td>(CR/NC Option) (CAN# AG-AB 8) (F/S)</td>
<td>This class introduces the place of microcomputers in agriculture, horticulture and natural resources. Students will learn to operate microcomputers by working with standard types of industry software. The class is not designed to give competency in computer programming. It is required for all agricultural, horticulture and natural resources majors.</td>
</tr>
<tr>
<td>ENVR 60</td>
<td>ENVIRONMENTAL SCIENCE (formerly NR 60)</td>
<td>3</td>
<td>(CR/NC Option) (CAN# AG-NR 8) (F/S)</td>
<td>Advisory: Students who wish to add a lab component to this class should co-enroll in ENVR 61. 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 learning format.</td>
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<tr>
<td>ENVR 61</td>
<td>ENVIRONMENTAL SCIENCE LABORATORY</td>
<td>1</td>
<td>(CR/NC Option) (I)</td>
<td>Corequisite: Student must be concurrently enrolled in ENVR 60, or have completed ENVR 60 with a grade of C or higher. Note: May include several field trips. A laboratory course designed to complement ENVR 60 and to acquaint the students with some of the more common laboratory and field tests and procedures utilized in environmental science.</td>
</tr>
<tr>
<td>ENVR 94</td>
<td>ENVIRONMENTAL RESOURCES WORKSITE LEARNING</td>
<td>1-4</td>
<td>(F/S)</td>
<td>Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester. Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units). 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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.</td>
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<tr>
<td>ENVR 149</td>
<td>CLASS A &amp; B LICENSE TRAINING (formerly AGRI 149)</td>
<td>1</td>
<td>(CR/NC Only) (I)</td>
<td>Prerequisite: A grade of C or higher in CONS 46. Note: 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 total. This is an advanced level course designed to give the participants practical skills and knowledge in the operation and safety of on-road heavy equipment. The course will emphasize safe operation skills, pre-operation inspections and Department of Motor Vehicles Class A and B license training as it pertains to operating on-road heavy equipment.</td>
</tr>
</tbody>
</table>

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**FAMILY STUDIES AND SERVICES (FSS)** (formerly Home Economics - HOEC)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Scheduling</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 10</td>
<td>INTRODUCTION TO HUMAN SERVICES</td>
<td>3</td>
<td>F/S</td>
</tr>
<tr>
<td>FSS 16</td>
<td>MARRIAGE AND FAMILY</td>
<td>3</td>
<td>CAN# FCS 12</td>
</tr>
<tr>
<td>FSS 18</td>
<td>ADULTHOOD AND AGING</td>
<td>3</td>
<td>CR/NC Option</td>
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<tr>
<td>FSS 25</td>
<td>NUTRITION</td>
<td>3</td>
<td></td>
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<tr>
<td>FSS 26</td>
<td>NUTRITION THROUGH THE LIFE SPAN</td>
<td>3</td>
<td></td>
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<tr>
<td>FSS 27</td>
<td>NUTRITION AND DISEASE</td>
<td>2</td>
<td></td>
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<tr>
<td>FSS 46</td>
<td>PERSONAL FINANCE</td>
<td>3</td>
<td></td>
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<tr>
<td>FSS 60</td>
<td>LIFE MANAGEMENT</td>
<td>3</td>
<td>CR/NC Option</td>
</tr>
<tr>
<td>FSS 94</td>
<td>FAMILY STUDIES AND SERVICES WORKSITE LEARNING</td>
<td>1-4</td>
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<tr>
<td>FSS 127</td>
<td>A PRACTICAL APPROACH TO NUTRITION</td>
<td>3</td>
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</tbody>
</table>

**Course Descriptions:**

- **FSS 10**: INTRODUCTION TO HUMAN SERVICES (3 Units) (F/S)
  
- **FSS 16**: MARRIAGE AND FAMILY (3 Units) (CAN# FCS 12) (F/S)
  
- **FSS 18**: ADULTHOOD AND AGING (3 Units) (CR/NC Option) (S)
  
- **FSS 25**: NUTRITION (3 Units) (CAN# FCS 2) (F/S)
  
- **FSS 26**: NUTRITION THROUGH THE LIFE SPAN (3 Units) (I)
  
- **FSS 27**: NUTRITION AND DISEASE (2 Units) (I)
  
- **FSS 46**: PERSONAL FINANCE (3 Units) (S)
  
- **FSS 60**: LIFE MANAGEMENT (3 Units) (CR/NC Option) (F/S)
  
- **FSS 94**: FAMILY STUDIES AND SERVICES WORKSITE LEARNING (1-4 Units)
  
- **FSS 127**: A PRACTICAL APPROACH TO NUTRITION (3 Units) (I)

**Prerequisites and Notes:**

- A grade of C or higher in FSS 25
- Students must have access to the Internet in order to complete assignments.
- Students must have access to the Internet in order to complete assignments.
- 54 lecture total
- 75 hours paid or 60 hours non-paid per unit
- Students will be required to go on local field trips for a total of 18 hours. Students must provide transportation.
- Students must provide transportation.
- Course is designed for the non-major who will study contemporary issues and applications of nutrition. The emphasis will be on a problem-solving approach to dietary planning and food selection as it relates to fitness and optimal health. It will help people focus on their own eating practices within the framework of the dietary guidelines for Americans.
FSS 197 SPECIAL TOPICS IN HOME ECONOMICS - .5-2 Units (CR/NC 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 home economics. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

FIRE TECHNOLOGY (FIRS)

FIRS 70 INTRODUCTION TO FIRE TECHNOLOGY - 3 Units (F)
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 (F)
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 learning format.

FIRS 72 FIRE PREVENTION TECHNOLOGY - 3 Units (S)
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 (CR/NC Only) (S)
Class Hours: 36 lecture/90 lab total
Review of fire behavior, equipment, and apparatus; cover basic wildland fire fighting tactics and strategy, methods of attack, and pre-planning fire problems. Course meets or exceeds the minimum requirements for entry-level firefighter positions in the California Department of Forestry (CDF) and the United States Forest Services (USFS). Note: To be considered for seasonal Firefighter positions by CDF, you must also hold the following certificates: Hazmat Operations, First Responder Medical.

FIRS 74 FIRE PROTECTION EQUIPMENT AND SYSTEMS - 3 Units (CR/NC Option) (F)
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 learning format.

FIRS 76 FIRE HYDRAULICS - 3 Units (CR/NC Option) (I)
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 (CR/NC Option) (I)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course will introduce the student to fundamental issues relating to fire fighting safety and survival. Students will evaluate case studies in which firefighters have been killed or injured. In addition, each student will be required to give an oral presentation based on an analysis of a “near miss” fatal fire/rescue scenario. This course may be offered in a distance learning format.

FIRS 85 FIRE COMMAND IA - 2 Units (CR/NC Option) (I)
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 (S)
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 learning format.

FIRS 87 FIRE COMMAND IB – 2 Units (CR/NC Only) (I)
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.

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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRS 100</td>
<td>BASIC FIRE COMPANY OPERATIONS - 2 Units (CR/NC Option)</td>
<td>2</td>
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<td></td>
<td>Class Hours: 18 lecture/54 lab total</td>
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<td>To provide the student with first hand knowledge of actual</td>
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<td>fire conditions. Student will learn terminology used in the</td>
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<td>field, and how to work in the chain of command under</td>
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<td>emergency conditions, company procedures, shift routine, and</td>
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<td></td>
<td>engine company evolutions. Note: This course may be</td>
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<td></td>
<td>repeated any number of times for credit by persons who are</td>
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<td>legally mandated to meet training requirements as a</td>
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<td>condition of continued paid or volunteer employment.</td>
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<td>FIRS 101</td>
<td>FIRE TECHNOLOGY CAREER PLACEMENT - 1 Unit (CR/NC Option) (S)</td>
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<td>Class Hours: 54 lab total</td>
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<td>Designed to assist the student in the final semester of</td>
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<td>vocational program to learn interview techniques, to develop</td>
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<td>an employment portfolio, and to interview with several</td>
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<td>potential employers with the express purpose of assisting</td>
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<td>the student to obtain the best employment upon graduation.</td>
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<td>FIRS 102</td>
<td>APPRENTICESHIP ACADEMY - 1.5 Units (CR/NC Option)</td>
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<td></td>
<td>Class Hours: 18 lecture/27 lab total</td>
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<td>This course will cover hazardous building materials/</td>
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<td></td>
<td>construction methods, rescue strategies, ventilation</td>
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<td></td>
<td>techniques, pre-plan methods, cautions regarding lab fires</td>
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<td>and instructional techniques for new personnel. Note: This</td>
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<td></td>
<td>course may be repeated any number of times for credit by</td>
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<td>persons who are legally mandated to meet training</td>
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<td>requirements as a condition of continued paid or volunteer</td>
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<td></td>
<td>employment.</td>
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<td>FIRS 104</td>
<td>FIREFIGHTER I ACADEMY - 21 Units (F/S)</td>
<td>21</td>
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<td></td>
<td>Class Hours: 234 lecture/450 lab total</td>
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<td>This course exceeds the minimum requirements established by</td>
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<td>the California State Fire Marshal’s Office for State</td>
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<td>Certification as a Firefighter I. This academy is an</td>
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<td>accredited regional academy approved by the California State</td>
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<td>Board of Fire Service. Final certification as a Firefighter</td>
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<td>I is verified by the State Fire Marshal’s Office after the</td>
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<td></td>
<td>student completes the Academy, works as a Firefighter for</td>
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<td>one year and has their final paperwork signed by the Fire</td>
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<td>Chief of the Department where they have worked.</td>
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<td>FIRS 105</td>
<td>DRIVER/OPERATOR 1A: EMERGENCY VEHICLE OPERATIONS – 1.5 Units</td>
<td>1.5</td>
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<td>(I)</td>
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<td>Note: Student must provide a fire engine for the driving</td>
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<td></td>
<td>portion of the course. Student must possess a valid Class B</td>
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<td></td>
<td>California Driver’s License or Learner’s Permit.</td>
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<td></td>
<td>Class Hours: 18 lecture/27 lab total</td>
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<td></td>
<td>Designed to provide the student with information on driver</td>
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<td>techniques for emergency vehicles and techniques of basic</td>
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<td>inspection and maintenance for emergency vehicles, including</td>
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<td>actual driving exercises under simulated emergency</td>
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<td>conditions.</td>
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<td>FIRS 106</td>
<td>DRIVER/OPERATOR 1B: PUMP OPERATIONS – 1.5 Units (I)</td>
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<td>Note: Student must provide a fire engine for the driving</td>
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<td>portion of the course. Student must possess a valid Class B</td>
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<td>California Driver’s License or Learner’s Permit.</td>
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<td></td>
<td>Class Hours: 18 lecture/27 lab total</td>
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<td></td>
<td>Course provides the student with the information, theory,</td>
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<td></td>
<td>methods and techniques for operating fire service pumps,</td>
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<td>including: types of pumps, engine and pump gauge</td>
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<td>maintenance, unsafe pumping conditions, pressure relief</td>
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<td>devices, cooling systems, water supplies, drafting field</td>
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<td>hydraulics, and pumping operations.</td>
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<td>FIRS 108</td>
<td>FIREFIGHTER II ACADEMY - 5 Units (S)</td>
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<td>Note #1: Students will have to provide their own safety</td>
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<td>equipment, which meets NFPA standards. Equipment will</td>
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<td></td>
<td>include: helmet, gloves, structural fire fighting coat and</td>
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<td>pants, boots, eye protection, etc.</td>
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<td>Note #2: To receive a California State Fire Marshal’s</td>
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<td></td>
<td>Certification, students must have completed FIRS 104 prior</td>
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<td>to enrollment in FIRS 108.</td>
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<td></td>
<td>Class Hours: 72 lecture/54 lab total</td>
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<td></td>
<td>An extended format of the Firefighter I course with</td>
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<td>advanced skills. Designed to provide the Firefighter I</td>
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<td>with both manipulative and technical skills. Course</td>
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<td>approved by the California State Board of Fire Services and</td>
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<td>California State Fire Marshal’s Office. Upon successful</td>
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<td>completion of course work, Firefighter II certification will</td>
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<td>be granted. Note: This course may be repeated any number of</td>
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<td>times for credit by persons who are legally mandated to</td>
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<td>meet training requirements as a condition of continued paid</td>
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<td>or volunteer employment.</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>CR/NC Option</td>
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<td>FIRS 113</td>
<td>FIRE CREW SUPERVISOR - 1 Unit (CR/NC Option)</td>
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<td></td>
<td>Class Hours: 18 lecture total</td>
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<td>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.</td>
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<td>FIRS 116</td>
<td>ENGINE ACADEMY - 3 Units (CR/NC Option) (S)</td>
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<td>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.</td>
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<td>Class Hours: 36 lecture/54 lab total</td>
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<td>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.</td>
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<td>FIRS 118</td>
<td>INTRODUCTION TO WILDLAND FIRE FIGHTING – 1.5 Units (S)</td>
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<td>Class Hours: 18 lecture/27 lab total</td>
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<td>This course meets requirements in the natural resources and fire technology programs. A review of fire chemistry, equipment, and manpower, basic fire fighting strategy, methods of attack, pre-planning fire problems, and fire line safety are included in the course. A U.S. Forest Service USDA Certificate of Training (Basic Firefighter's Training) will be issued after satisfactory completion of this course. Approximately 50 percent of labs will be in the field.</td>
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<td>FIRS 119</td>
<td>PREPARING FOR INCIDENT COMMAND - 1 Unit (CR/NC Option)</td>
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<td>Note: This course is designed for the volunteer firefighter.</td>
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<td></td>
<td>Class Hours: 18 lecture total</td>
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<td>This course deals with the preparation phase of commanding an emergency incident. Subjects covered are: Firefighters Survival, Fire Behavior, Fire Flow and Communications. This course is designed for the professional firefighter.</td>
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<td>FIRS 120</td>
<td>INCIDENT COMMAND SYSTEM ICS 200 - .5 Unit (CR/NC Option)</td>
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<td></td>
<td>Class Hours: 12 lecture total</td>
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<td>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).</td>
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<td>FIRS 123</td>
<td>DIVISION/GROUP SUPERVISOR (I-339) - 2 Units (I)</td>
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<td>Class Hours: 40 lecture total</td>
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<td>This course covers training that is needed by staff to perform the position of Division/Group Supervisor during an emergency situation. The course will teach management skills within the framework of the Incident Command System. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.</td>
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<td>FIRS 124</td>
<td>FIRE FIGHTING IN THE I-ZONE - 2 Units (CR/NC Option)</td>
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<td></td>
<td>Class Hours: 40 lecture total</td>
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<td></td>
<td>This course is designed to meet the training needs to initial and extended attack incident commanders and company officers confronting wildland fires that threaten life, property and improvements. This course is designed for professional firefighters.</td>
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<td>FIRS 131</td>
<td>HAZARDOUS MATERIALS TECHNICIAN IA – 2.5 Units (CR/NC Option) (I)</td>
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<td>Class Hours: 45 lecture total</td>
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<td>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.</td>
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<td>FIRS 132</td>
<td>HAZARDOUS MATERIALS TECHNICIAN 1B – 2.5 Units (CR/NC Option) (I)</td>
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<td>Class Hours: 45 lecture total</td>
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<td>An application of the information covered in FIRS 131 Hazardous Materials Technician IA, including the chemistry and hazards of various materials, chemicals 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.</td>
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*F* and *S* indicate semester course is usually offered. *I* indicates course may not be offered every year. Subject to change. Check the current class schedule.
FIRS 133  HAZARDOUS MATERIALS TECHNICIAN 1C – 2.5 Units (CR/NC Option) (I)

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 (CR/NC Option) (I)

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 I 300 - 1 Unit (CR/NC Option) (I)

Class Hours: 18 lecture total
A course of study describing the responsibilities of the organizational elements within each section of the ICS, staffing considerations, and reporting relationships. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Div. or at the National Interagency Fire Center Web Site (NIFC.gov).

FIRS 136  ADVANCED INCIDENT COMMAND SYSTEM I-400 - 1 Unit (CR/NC Option) (I)

Class Hours: 18 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 Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FIRS 140  JUVENTILE FIREFSETTER - 1 Unit (CR/NC Option) (I)

Class Hours: 18 lecture total
This course will focus on psychodynamics and treatment options, interviewing techniques, legal issues, community resources and networking concerning juvenile fire setters. The target audience for this class is fire service personnel, burn care professionals, mental health counselors, RNs, social workers, psychologists, psychiatrists, judicial system personnel and other health care professionals. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 145  LOW ANGLE RESCUE - .5 Unit (CR/NC Option)

Class Hours: 9 lecture/9 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 fire fighting coat and pants, boots, eye protection, etc.

FIRS 146  STANDARD FOR SURVIVAL - 1 Unit (CR/NC Option)

Class Hours: 18 lecture total
This course examines significant areas of firefighter fatalities and injuries associated with emergency and non-emergency situations. The course addresses causes of fatalities and injuries, and methods to implement recommended solutions.

FIRS 147  CONFINED SPACE AWARENESS AND RESCUE - .5 Unit (CR/NC 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.
FIRS 148 RESCUE SYSTEMS I – 1.5 Units (I)
Note: Students are required to provide personal safety equipment at a significant cost to the student.
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 will be required to train at heights of up to 200’ above ground.

FIRS 149 VEHICULAR EXTRICATION - .5 Unit (CR/NC Only) (F/S)
Note: Student should be a member of fire or rescue service or currently enrolled in the Fire Technology Program
Class Hours: 9 lecture/9 lab total
To introduce principles of vehicular extrications; 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.

FIRS 151 FIRE CONTROL 1: BASIC FIRE CHEMISTRY - 1 Unit (CR/NC Option)
Class Hours: 18 lecture total
This course is a basic overview of fire chemistry and fire behavior designed for the beginning or volunteer firefighter. Includes classes of fire, fundamentals of heat transfer, fire characteristics of materials, products of combustion, hazardous and explosive materials, extinguishing agents, size up, and exposure protection.

FIRS 152 FIRE CONTROL 2: STRUCTURAL - 1 Unit (CR/NC Option)
Class Hours: 18 lecture total
A course designed to provide the student with information, methods and techniques for operating basic fire fighting tools and carrying out basic fire fighting evolutions. Areas covered include hose, nozzles, and fitting; ground ladders, self contained breathing apparatus; pump operations in theory; pump operations in the field; and the use of fire extinguishers.

FIRS 153 FIRE CONTROL 3: STRUCTURAL FIRE FIGHTING - .5 Unit (CR/NC Option)
Class Hours: 9 lecture/9 lab total
This course utilizes the burning of derelict building to provide students with hands-on fire fighting experience in fire behavior within a building, ventilation; SCBA use and survival techniques, interior fire attack, exterior fire attack, and basic fire investigation as it relates to fire fighting.

FIRS 154 FIRE CONTROL 4: GAS & OIL FIRE FIGHTING - .5 Unit (CR/NC Option)
Class Hours: 9 lecture/9 lab total
Classroom and field instruction on Basic Fire Control relating to Emergency Operations. To develop the knowledge and attitude necessary to safely, in emergency and non-emergency modes, control gas and liquid fires.

FIRS 156 FIRE CONTROL 6: WILDLAND FIREFIGHTING ESSENTIALS - 1 Unit (CR/NC Option)
Class Hours: 18 lecture total
This wildland fire fighting course provides information, methods and techniques for the utilization of: wildland tactics, hand tools, and hoselays; wildland hand crew operations; and the use of aircraft and bulldozers for wildland fire fighting.

FIRS 157 FIRE ENGINE DRIVER TRAINING - 1 Unit (CR/NC Option)
Limitation on Enrollment: In order to complete the requirements of this course and be able to participate in the hands-on-driving portion of the course, all students must obtain from the DMV a Class “B” Restricted Firefighter Drivers License Permit, or possess a valid California Class “B” license, or obtain a California Class “B” permit.
Note: Fire engines must be provided by the students sponsoring agency for drivers training and are responsible for all costs incurred as a result of the use of the vehicle in the training program including insurance which meets district standards.
Class Hours: 9 lecture/27 lab total
A course of both classroom instruction and field application on basic driving laws relating to a California “Restricted Firefighter Drivers License.” This course is designed to develop driving knowledge, attitudes, and skills necessary to operate fire engines safely.

FIRS 158 PUMP OPERATIONS - 1 Unit (CR/NC Option)
Class Hours: 18 lecture total
A course designed to develop a knowledge of fire pumps. Subjects to be covered are pumping principles, practical hydraulics, and the ability to drive apparatus and operate pumps.

FIRS 159 FIRE ENGINE DEFENSIVE DRIVING - .5 Unit (CR/NC Option)
Class Hours: 9 lecture total
Classroom instruction on basic driving laws relating to Emergency Vehicle Operations. To develop: Emergency Vehicle Operations, driving knowledge, and attitude necessary to operate their vehicles safely in emergency and non-emergency modes.

FIRS 160 TITLE 19 & 24 (FIRE TECHNOLOGY) – 1.5 Unit (I)
Class Hours: 27 lecture total
Designed specifically for fire prevention bureau personnel and others responsible for, or interested in, the enforcement of Title 19 and 24 regulations of the California administrative codes. These codes cover public assembly buildings, such as schools, hospitals, and rest homes. Offered every 3 to 6 years as needed.

*F* and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year.
Subject to change. Check the current class schedule.
FIRS 179  FIRE ATTACK STRATEGY & TACTICS - 1 Unit (CR/NC Option)
Class Hours: 9 lecture/27 lab total
This course will overview the technical and practical management of fire ground operations of commercial and residential structures by company officers. This course meets NFPA 1021 Standards for Fire Officer I.

FIRS 180  FIRE MANAGEMENT 1 – 2.5 Units (I)
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 181  FIRE INSTRUCTOR 1A – 1.5 Units (S)
Class Hours: 18 lecture/27 lab total
This course will prepare students to deliver manipulative (hands on) lesson plans within the fire service training system. Material includes: course development, constructing behavioral objectives, writing manipulative lesson plans and theories of learning. Each student must complete two student teaching demonstrations.

FIRS 182  FIRE INSTRUCTOR 1B – 1.5 Units (S)
Class Hours: 18 lecture/27 lab total
This course prepares students to deliver "technical" lesson plans within the fire service training systems. Topics include: evaluation, test development, test administration, selections and developing instructional aids and techniques for presentation instruction. Each student must complete two student teaching demonstrations.

FIRS 183  FIRE PREVENTION 1A, INTRODUCTION TO THE CALIFORNIA FIRE CODE - 2 Units (S)
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 (I)
Class Hours: 40 lecture total
Designed to instruct student in the operation and inspection of extinguishers, fixed system, sprinklers, standpipes and alarm systems. Provide technical information on hazardous materials, flammable and combustible liquids and compressed liquefied gasses. Course is one of a series for fire officer course work to meet State of California Fire Officer Certification.

FIRS 185  FIRE COMMAND 2A, COMMAND TACTICS AT MAJOR FIRES – 1.5 Units (I)
Class Hours: 18 lecture/27 lab total
Course prepares the officer to use management techniques and Incident Command Systems when commanding multiple alarms or large suppression forces.

FIRS 189  FIRE INVESTIGATION 1A - 2 Units (CR/NC Option) (I)
Class Hours: 40 lecture total
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.

FIRS 191  FIRE INVESTIGATION 1B - 2 Units (I)
Class Hours: 36 lecture/9 lab total
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.

FIRS 192  FIRE INVESTIGATION REVIEW - .5 Unit (CR/NC Option)
Class Hours: 9 lecture total
This is a review course to update fire service personnel in the latest techniques used in fire investigation work, and give information on the following: juvenile fire setter, report writing, evidence collection, preservation procedures, law and legal problems.

FIRS 197  SPECIAL TOPICS IN FIRE TECHNOLOGY - .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in fire technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

FIRS 198  SPECIAL SKILLS TOPICS IN FIRE TECHNOLOGY - .5-2 Units (CR/NC Option)
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in fire technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Class Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRS 360</td>
<td>LIVE FIRE TRAINING, BASIC STRUCTURAL OPERATIONS</td>
<td>0</td>
<td>I</td>
<td>9 lecture/9 lab total</td>
<td>This course provides the student with hands-on fire fighting experience in fire behavior, ventilation, overhaul, interior and exterior fire attack operations.</td>
</tr>
<tr>
<td>FIRS 361</td>
<td>ROPE RIGGING FOR RESCUE</td>
<td>0</td>
<td>I</td>
<td>9 lecture/9 lab total</td>
<td>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.</td>
</tr>
<tr>
<td>FIRS 362</td>
<td>BASIC FIRE BEHAVIOR AND CHEMISTRY</td>
<td>0</td>
<td>I</td>
<td>18 lecture total</td>
<td>This course provides the student with the concepts of the fire triangle and tetrahedron, fire chemistry, fire behavior, products of combustion, types of extinguishing agents, hazardous materials properties and effects, and oxidizing agents.</td>
</tr>
<tr>
<td>FIRS 363</td>
<td>BASIC STRUCTURAL OPERATIONS FOR VOLUNTEERS</td>
<td>0</td>
<td>I</td>
<td>18 lecture total</td>
<td>This course is designed to provide the volunteer firefighter with the fundamental concepts and skills for operating at residential and light commercial structure fires. Topics include the use of handlines, ground ladders, self-contained breathing apparatus, pump operations and the use of fire extinguishers.</td>
</tr>
<tr>
<td>FIRS 364</td>
<td>PUMP OPERATIONS FOR VOLUNTEERS</td>
<td>0</td>
<td>I</td>
<td>18 lecture total</td>
<td>A course designed to develop knowledge of fire pumps. Subjects to be covered include pumping principles, practical hydraulics, and the ability to drive apparatus and operate pumps.</td>
</tr>
</tbody>
</table>

**FIRE TECHNOLOGY/WILDLAND FIRE TECHNOLOGY LOGISTICS (FTWL)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Class Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTWL 101</td>
<td>WILDLAND FIRE BEHAVIOR</td>
<td>3</td>
<td>CR/NC</td>
<td>54 lecture total</td>
<td>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.</td>
</tr>
<tr>
<td>FTWL 102</td>
<td>WILDLAND FIREFIGHTER SAFETY AND SURVIVAL</td>
<td>3</td>
<td>CR/NC</td>
<td>54 lecture total</td>
<td>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.</td>
</tr>
<tr>
<td>FTWL 103</td>
<td>WILDLAND FIRE OPERATIONS</td>
<td>3</td>
<td>CR/NC</td>
<td>54 lecture total</td>
<td>This course of study presents the command structure and operational processes for ground and air operations in the control of wildland fires.</td>
</tr>
<tr>
<td>FTWL 104</td>
<td>WILDLAND PUBLIC INFORMATION OFFICER, PREVENTION, AND INVESTIGATION</td>
<td>3</td>
<td>CR/NC</td>
<td>54 lecture total</td>
<td>A course of study, which presents the information necessary to understand the roles and functions of the wildland fire information officer, wildland fire prevention, and investigation of wildland fires.</td>
</tr>
<tr>
<td>FTWL 105</td>
<td>WILDLAND FIRE PLANNING, LOGISTICS, AND FINANCE</td>
<td>3</td>
<td>CR/NC</td>
<td>54 lecture total</td>
<td>This course of study explains the roles, responsibilities and functions of the planning, logistics, and finance sections that are utilized during the control of wildland fires.</td>
</tr>
</tbody>
</table>
FTWL 110 DISPLAY PROCESS S-245 - .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
A course of study that presents the information necessary for the student to be able to function as a Display Processor on a wildland fire incident. The course includes the information on how to record information on location and status of equipment, record information of personnel on appropriate forms, and develop organization charts and assignment lists based on information recorded. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 111 CHECK-IN RECORDER/STATUS RECORDER S-248 - 2 Units (CR/NC Option) (I)
Class Hours: 36 lecture total
This course of study presents the information necessary for the student to be able to understand the duties and responsibilities of a Check-in Recorder/Status Recorder on a wildland fire. The course presents how to record information on location and status of equipment, record information of personnel on appropriate forms, and develop organization charts and assignment lists based on information recorded. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 112 ORDERING MANAGER J-252 - .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
This course of study presents the necessary information for the student to be able to function as an Ordering Manager on a wildland fire incident. The course includes, establishing ordering procedures, set up filing system, identify times and locations for delivery of supplies and equipment, and submission of all ordering documents to documentation control unit before demobilization. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 113 RECEIVING AND DISTRIBUTION MANAGER J-253 - .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
This course of study presents the necessary information for the student to function as a Receiving and Distribution Manager on a wildland fire. The course includes establishing procedures for receiving supplies and equipment, review incident action plan and operational instructions provided by logistics section concerning scope and duration of incident operations that may involve supply requirements, determine supply unit personnel requirements, inspect and accept supplies, and provide inventory records to documentation unit upon demobilization of supply unit. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 114 BASE/CAMP MANAGER J-254 - 2 Units (CR/NC Option) (I)
Class Hours: 36 lecture total
This course of study presents the information necessary for the student to be able to function as a Base Camp Manager on a wildland fire incident. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 115 EQUIPMENT MANAGER J-255 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study presents the information necessary for the student to be able to function as an Equipment Manager on a wildland fire incident. This course includes obtaining necessary equipment and supplies, how to provide maintenance and fueling according to schedule, preparation of schedules to maximize use of available transportation, inspection of equipment, and preparation and use of proper equipment agreements. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).
FTWL 116 TOOL AND EQUIPMENT SPECIALIST J-256 - .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
This course of study presents the necessary information for the student to function as a Tool and Equipment Specialist on a wildland fire incident. The course includes utilization of work space, work assignment, numbers and kinds of tools coordination hand, determine personnel requirements, establish a tool inventory and accountability system, ensure that all appropriate safety measures are taken in tool conditioning area, and demobilize tool area in accordance with incident demobilization plan. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 117 INCIDENT COMMUNICATIONS CENTER MANAGER J-257 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study presents the information needed by the student to function as a Communications Manager on a wildland fire incident. This includes how to establish the incident communications/message center, acquire supplies to set up and operate the incident communications/message center, and how to organize and manage the incident communications/message center. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 118 INCIDENT COMMUNICATIONS TECHNICIAN S-258 - 2 Units (CR/NC Option) (I)
Class Hours: 36 lecture total
This course of study presents information necessary for the student to be able to function as a Communications Unit Leader on a wildland fire incident. This course includes clear text radio transmissions, interrelationships between ICS functions and the Communications Unit Leader, organize and staff the Communications Unit, and develop an effective communications plan based on the needs for each operational period and complete the necessary paperwork and forms. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 119 SECURITY MANAGER J-259 - .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
This course of study presents the information needed by the student to function as a Security Manager on a wildland fire incident. This course includes briefing information from facilities unit leader, how to establish contacts with local law enforcement agencies as required, special custodial requirements which may affect security operations, and develop a security plan. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 120 INTERAGENCY INCIDENT BUSINESS MANAGEMENT S-260 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study presents an understanding of the fiscal issues of wildland firefighting. It includes employee responsibilities and conduct, be able to recruit personnel and equipment for wildland firefighting, and provide fiscally sound equipment and personnel time recording. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 121 PERSONNEL TIME RECORDER J-261 - 1 Unit (CR/NC Option) (I)
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as a personnel time recorder on a wildland fire incident. This course includes establishing and maintaining employee time reports within the first operational period; how to initiate, gather, or update a time report from all applicable personnel assigned to the incident for each operational period, and ensure that all employee identification information is verified to be correct. Includes contractors and commissary records, and personnel pay documents. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year. Subject to change. Check the current class schedule.
This course of study presents the information necessary for the student to be able to function as an Equipment Time Recorder on a wildland fire incident. This course includes how to establish and maintain equipment time reports within the first operational period, the necessary steps to initiate, gather, or update a time report from all applicable equipment assigned to the incident for each operational period and how to close out equipment time documents prior to personnel or equipment leaving the incident. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 123 CLAIMS MANAGER J-263 - 1 Unit (CR/NC Option) (I)

Class Hours: 18 lecture total

This course of study presents the information necessary for the student to be able to function as a Claims Manager on a wildland fire incident. This course presents what is required for handling all claims related activities (other than injury) for the incident, utilization of proper support for conducting a claims investigation, preparation of claim reports, and provide information to protect the interest of the government. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 124 COMPENSATION FOR INJURY MANAGER J-264 - 1 Unit (CR/NC Option) (I)

Class Hours: 18 lecture total

This course of study presents the information necessary for the student to be able to function as a Compensation for Injury Manager on a wildland fire incident. This course includes how to investigate and document all personnel injury or deaths related to activities on the incident, utilization of the proper support for conducting an injury or death investigation, and preparation of compensation for injury documents in accordance with agency policy and procedures. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 125 COMMISSARY MANAGER J-266 - 1 Unit (CR/NC Option) (I)

Class Hours: 18 lecture total

This course of study presents the information necessary for the student to be able to function as a Commissary Manager on a wildland fire incident. The course includes how to set up and provide commissary operation to meet incident needs maintaining complete record of commissary stock including invoices for material received, issuance records, transfer records and closing inventories, and demobilize commissary operation in accordance with incident demobilization plan. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 126 DOCUMENTATION UNIT LEADER J-342 – 1 Unit (CR/NC Option) (I)

Class Hours: 18 lecture total

This course of study presents the information necessary for the student to be able to function as a Documentation Unit Leader on a wildland fire incident. This course includes how to establish and organize incident files, retention and filing of duplicate copies of official forms and reports, preparation of incident documentation for planning section chief when requested and maintain, retain, and store incident files for after incident use. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 127 SITUATION UNIT LEADER S-346 - 1 Unit (CR/NC Option) (I)

Class Hours: 18 lecture total

This course of study presents the information necessary for the student to be able to function as a Situation Unit Leader on a wildland fire incident. This course includes how to collect all incident related data for the duration of the incident, utilization of infrared data as applicable, post data on unit work displays and command post displays at scheduled intervals or as requested by command post personnel and provide resources and situation status information in response to specific requests. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).
FTWL 128 DEMOBILIZATION UNIT LEADER S-347 - 1 Unit (CR/NC Option) (I)
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as a Demobilization Unit Leader on a wildland fire incident. This course includes objectives, priorities, and constraints on demobilization from the planning section chief, agency representatives, and contractors as applicable, how to obtain identification and description of surplus resources and probable release times, developing release procedures in coordination with other sections/units and agency dispatch center(s), and coordinate and closely supervise the demobilization process. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 129 RESOURCES UNIT LEADER S-348 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study presents the information necessary for the student to be able to function as a Resource Unit Leader. This course covers how to gather, post, and maintain incident resource status, gather, post, and maintain resource status of transportation and support vehicles and personnel, and maintain master list of all resources checked in at the incident. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 130 FACILITIES UNIT LEADER S-354 - 2 Units (CR/NC Option) (I)
Class Hours: 36 lecture total
This course of study presents an understanding of the duties and responsibilities of the Facilities Unit Leader in a wildland fire incident. The course presents factors in determining requirements for each facility, layouts of incident facilities and activation of incident facilities. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 131 GROUND SUPPORT UNIT LEADER S-355 - .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
This course of study presents the information necessary for the student to be able to function as a Ground Support Unit Leader on a wildland fire incident. The course includes how to implement traffic plan developed by planning section, activating fueling, maintenance, and repair of ground resources, how to requisition maintenance and repair supplies, and how to maintain incident roads. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 132 SUPPLY UNIT LEADER S-356 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study presents the information necessary for the student to be able to function as a Supply Unit Leader on a wildland fire incident. This course includes description of the activities of the Supply Unit, what is needed to set up and staff Supply Unit, organization of and staffing of Supply Unit, and demobilization. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 133 FOOD UNIT LEADER S-357 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study presents the information necessary for the student to be able to function as a Food Unit Leader on a wildland fire incident. This course includes how to determine the method of feeding to best fit each situation, obtain the necessary equipment and supplies to operate food service facilities at base and camps, and ensure that all appropriate health and safety measures are taken. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

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FTWL 134 COMMUNICATIONS UNIT LEADER S-358 - 4 Units (CR/NC Option) (I)
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.

FTWL 135 MEDICAL UNIT LEADER S-359 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study presents the information necessary for the student to be able to function as a Medical Unit Leader. This course covers how to determine level of emergency medical activities, activate medical unit, preparation of the Medical Emergency Plan, and respond to requests for medical aid. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 136 COST UNIT LEADER I-362 - .5 Units (CR/NC Option) (I)
Class Hours: 9 lecture total
This course of study presents the information necessary for the student to be able to function as a Cost Unit Leader on a wildland fire incident. The course includes how to set up a system for collecting and documenting all expenditures relating to a wildland fire incident, establishing procedures for collecting cost data, coordination with appropriate personnel, and prepare reports in accordance with agency policy and procedures. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 137 COMPENSATION/CLAIMS UNIT LEADER I-363 - 1 Unit (CR/NC Option) (I)
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as a Compensation/Claims Unit Leader on a wildland fire incident. The course includes how to set up system for investigating, documenting, and processing claims, initiate investigations on claims, and preparation of claim reports in accordance with agency policy and procedures. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 138 TIME UNIT LEADER I-365 - .5 Unit (CR/NC Option) (I)
Class Hours: 12 lecture total
This course of study presents the information necessary for the student to be able to function as a Time Unit Leader on a wildland fire incident. The course includes how to set up system for documenting all personnel assigned to a wildland fire incident, establish procedures for collecting time data, set up comissary operation, and prepare reports in accordance with agency policy and procedures. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 139 PROCUREMENT UNIT LEADER I-368 - .5 Unit (CR/NC Option) (I)
Class Hours: 12 lecture total
This course of study presents the information necessary for the student to be able to function as a Procurement Unit Leader on a wildland fire incident. The course includes how to set up a system for collecting and documenting all equipment assigned to a wildland fire incident, how to administer vendor contracts, establish procedures for collecting time data, and prepare reports in accordance with agency policy and procedures. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).
FTWL 140 PLANNING SECTION CHIEF S-440 – 1.5 Units (CR/NC Option) (I)

**Class Hours:** 27 lecture total

This course of study presents the information necessary for the student to be able to function as a Planning Section Chief on a wildland fire incident. The course includes how to develop the relationship between the other General Staff members and the Planning Section Chief, supervise the planning function, and receive information routinely or as requested about operations activities from Situation Unit field observers and operations personnel. **NOTE:** While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 141 LOGISTICS SECTION CHIEF S-450 - 2 Units (CR/NC Option) (I)

**Class Hours:** 36 lecture total

This course of study presents the information necessary for the student to be able to function as a Logistics Section Chief on a wildland fire incident. The course includes how to organize and staff the Logistics Section to meet the needs of a wildland fire incident, demobilize the Logistics Section according to the demobilization process at a wildland fire incident, and be able to perform as a Logistics Section Chief at a wildland fire incident. **NOTE:** While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 142 FINANCE SECTION CHIEF S-460 - 2 Units (CR/NC Option) (I)

**Class Hours:** 36 lecture total

This course of study presents the information necessary for the student to be able to function as a Finance Section Chief on a wildland fire incident. The course includes how to establish and be responsible for all financial and cost analysis aspects of the incident, supervising members of the finance section, and ensure that all obligation documents initiated at the incident are properly prepared and completed. **NOTE:** While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 143 MULTI-AGENCY COORDINATION I-401 - .5 Unit (CR/NC Option) (I)

**Class Hours:** 9 lecture total

A course of study describing the major elements associated with developing and implementing an effective multi-agency coordination system. This course describes essential differences between Area Command, Multi-Agency Coordination Systems, and Jurisdictional Emergency Operations Centers. **NOTE:** While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 144 INCIDENT COMMAND SYSTEM FOR EXECUTIVES I-402 - .5 Unit (CR/NC Option) (I)

**Class Hours:** 9 lecture total

This course of study presents an ICS orientation for executives, administrators, and policy makers. It provides a basic understanding of ICS, unified and area command, and multi-agency coordination to those persons responsible for establishing or implementing policy, but who normally are not a part of the on-scene ICS organization. **NOTE:** While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

*F* and *S* indicate semester course is usually offered. *I* indicates course may not be offered every year. Subject to change. Check the current class schedule.
FTWO 110  BASIC WILDLAND FIRE ORIENTATION S-110 – .5 Unit (CR/NC Option) (I)
Class Hours:  9 lecture total
This course of study provides information that is essential for a non-operations individual assigned to a wildland fire incident to have a successful first assignment. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 111  FIREFIGHTER TRAINING S-130 – 2 Units (I)
Class Hours:  36 lecture total
This course of study is designed to train new firefighters in basic firefighting skills, and the knowledge necessary to effectively handle wildland firefighting situations. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 112  ADVANCED FIREFIGHTER TRAINING S-131 – 5 Unit (I)
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 United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 113  INTRODUCTION TO WILDLAND FIRE BEHAVIOR S-190 – .5 Unit (CR/NC Option) (I)
Class Hours:  9 lecture total
This course of study provides an introduction to wildland fire behavior issues that are important to wildland fire spread and safety to firefighters involved in suppression. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 114  INITIAL ATTACK INCIDENT COMMANDER TYPE 4 (ICT4) S-200 – 1.5 Units (CR/NC Option) (I)
Class Hours:  27 lecture total
This course of study is designed to provide the initial attack commander of small non-complex wildland fires with the ability to safely suppress the fire within the guidelines of the Incident Command System, and agency guidelines. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 115  SUPERVISORY CONCEPTS AND TECHNIQUES S-201 – 1 Unit (CR/NC Option) (I)
Class Hours:  18 lecture total
This course of study is for the experienced wildland firefighter to be able to apply the principles of communication and supervision required of a single resource boss to perform on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 116  FIRE OPERATIONS IN THE WILDLAND/URBAN INTERFACE S-215 – 2 Units (CR/NC Option) (I)
Class Hours:  36 lecture total
A course of study to prepare initial attack incident commanders and company officers to effectively deal with wildland fires that threaten life, property, and improvements. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).
FTWO 117 PORTABLE PUMPS AND WATER USE S-211 – 1.5 Units (I)
Class Hours: 27 lecture total
This course of study is for firefighters needing formal training in order to gain competency in the use of portable pumps and water in wildland fire fighting. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 118 WILDFIRE POWERSAWS S-212 – 1 Unit (I)
Class Hours: 16 lecture/12 lab total
Wildfire Powersaws is a required course for those planning to operate, or directly supervise, the operation of chain saws on wildfires. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 119 DRIVING FOR THE FIRE SERVICE S-216 – 2 Units (CR/NC Option) (I)
Class Hours: 36 lecture/12 lab total
This course of study is designed to instruct fire personnel on proper methods and procedures for driving fire equipment on the highway and off-road conditions. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 120 INTERAGENCY HELICOPTER TRAINING GUIDE S-217 – 2.5 Units (CR/NC Option) (I)
Class Hours: 45 lecture total
A course of study of the tactical and logistical use of helicopters in wildland fire control operations. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 121 CREW BOSS S-230 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study is to identify the hazards and risks on wildland fires and teach the tactics which are appropriate for the crew boss during the various wildland fire situations. The course also identifies crew boss responsibilities prior to and during mobilization, on the incident and during demobilization. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 122 ENGINE BOSS S-231 – .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
This course of study is to prepare advanced firefighters/squad bosses with the ability to understand the function as an engine boss in the control of wildland fires. This course presents the issues of tactics and safety in the control of wildland fires, and identifies the mobilization and demobilization procedures of an engine crew on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 123 DOZER BOSS S-232 – 1 Unit (CR/NC Option) (I)
Class Hours: 18 lecture total
This course of study is to prepare advanced firefighters/squad bosses with the ability to understand and function as a dozer boss in the control of wildland fires. This course presents the issues of tactics and safety in the control of wildland fires, and identifies the mobilization and demobilization procedures of a dozer on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

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FTWO 124  TRACTOR PLOW BOSS S-233 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study is to prepare advanced firefighters/squad bosses with the ability to understand and function as a tractor/plow boss in the control of wildland fires. This course presents the issues of tactics and safety in the control of wildland fires, and identifies the mobilization and demobilization procedures of a tractor/plow on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 125  IGNITION OPERATIONS S-234 – 1 Unit (CR/NC Option) (I)
Class Hours: 18 lecture/8 lab total
This course of study presents the application of safety considerations involved in a firing operation. It also provides the student with the necessary information to operate, maintain and use firing devices, and to use backfire as an indirect attack method against a rapidly spreading wildfire. The student will also learn the proper application of fire suppression firing methods and practices. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 126  FELLING BOSS S-235 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
The felling boss has the responsibility of building fireline in areas where saws are needed to build fire control lines. The felling boss must determine the capabilities and limitations of the felling crew, identify the special equipment needed for the assignment, understand the issues of tactics and safety in the control of wildland fires, and identify the mobilization and demobilization procedures of a felling crew on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 127  STAGING AREA MANAGER J-236 – .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
The Staging Manager is responsible for establishing and maintaining staging areas where resources are assigned prior to being given a specific fire assignment. The Staging Manager is responsible for all activities in the staging area including determining if there is any need for temporary assignment of logistics service support (fuel tender, food delivery, sanitation) to staging areas and make arrangements for temporary logistics, if required, by notifying logistics section chief. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 128  FIELD OBSERVER S-244 – 1.5 Units (I)
Class Hours: 27 lecture total
A course of study providing the student with the necessary skills to function as a Field Observer on a wildland fire incident. This course presents an understanding of the various types of maps used in wildland fire control, map scale and use in determining location of wildland fire, topographic maps and how to use them, and be able to perform calculations to determine the size of fire on a map. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 129  INTERAGENCY INCIDENT BUSINESS MANAGEMENT S-260 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study is designed to teach the basic concepts of fiscal management of wildland fire incidents. It includes correct and fiscally sound personnel and equipment procurement, time recording, and proper documentation. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).
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Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

Subject to change. Check the current class schedule.
FTWO 136  FIRE SUPPRESSION TACTICS S-336 – 2 Units (CR/NC Option) (I)
Class Hours: 36 lecture total
A course of study that presents the experienced wildland firefighter with the tactics necessary for the safe utilization of resources to control wildland fires. This course covers the review and comparison of tactical assignments with incident objectives, analyzing capabilities of the resources assigned and making work assignments for each resource to accomplish the tactical objectives in an assigned area. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 137  DIVISION/GROUP SUPERVISOR S-339 – 1 Unit (CR/NC Option) (I)
Class Hours: 24 lecture total
A course of study for Initial Attack Incident Commanders, Task Force/Strike Team Leaders to be able to function as a Division/Group Supervisor on a wildland fire incident. The course defines and differentiates between the division and group supervisor positions, and teaches the difference between the two positions. The relationships of Division/Group Supervisor is contrasted with Strike Team Leader, Task Force Leader, and Initial Attack Incident Commander. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 138  INTERMEDIATE AVIATION OPERATIONS S-370 – 2 Units (CR/NC Option) (I)
Class Hours: 36 lecture total
This course of study is to provide Incident Commanders and other fire line supervisors with an understanding of the aviation tools and knowledge to effectively use aviation resources safely, effectively and efficiently on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 139  HELIBASE MANAGER S-371 – 2 Units (CR/NC Option) (I)
Class Hours: 36 lecture total
A course of study that provides the information necessary for an advanced firefighter/crew boss or helicopter manager to take over the function of a helibase on a wildland fire incident. The course covers reporting to assigned helibase and how to determine if staffing and aircraft needs are satisfactory, properly review and implement helibase checklist, identify problems that may necessitate a safety briefing and coordination with Air Support Group Supervisor and Air Tactical Group Supervisor. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 140  HELICOPTER COORDINATOR J-374 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study teaches the duties and responsibilities of the Helicopter Coordinator on a wildland incident. The course includes how to determine aircraft (air tankers and helicopters) operating within incident area of assignment, implement air safety requirements and procedures, and coordinate activities with air attack supervisor, air tanker coordinator, air support supervisor, and ground operations personnel. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 141  AIR SUPPORT GROUP SUPERVISOR J-375 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
The Air Support Group Supervisor is primarily responsible for supporting and managing logistical support for helibase and helispot operations. This position identifies resources, supplies dispatched for air support group, requests special air support teams from appropriate sources through logistics section, determines need for assignment of personnel and equipment at each helibase and helispot, and maintains coordination with airbases supporting the incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>CR/NC Option</th>
<th>I</th>
<th>Class Hours</th>
<th>Description</th>
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<tbody>
<tr>
<td>FTWO 142</td>
<td>AIR TANKER COORDINATOR S-376</td>
<td>2</td>
<td>CR/NC</td>
<td>I</td>
<td>36 lecture</td>
<td>The Air Tanker Coordinator is responsible for coordinating air tanker operations, and is always airborne. Duties include if the restricted air space declaration has been requested through FAA, determine the location of fixed-wing facilities supporting air tanker operations, and determine if all aircraft including air tankers and helicopters operating within incident area of assignment. Survey incident area to determine situation, aircraft hazards, and other potential problems. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).</td>
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<tr>
<td>FTWO 143</td>
<td>AIR TACTICAL GROUP SUPERVISOR S-378</td>
<td>2</td>
<td>CR/NC</td>
<td>I</td>
<td>40 lecture</td>
<td>Air Tactical Group Supervisor is primarily responsible for the coordination of aircraft operations when fixed and/or rotary-wing aircraft are operating on a wildfire. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).</td>
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<tr>
<td>FTWO 144</td>
<td>INTRODUCTION TO WILDLAND FIRE BEHAVIOR CALCULATIONS S-390</td>
<td>1</td>
<td>CR/NC</td>
<td>I</td>
<td>18 lecture</td>
<td>This course of study presents the information necessary for the student to become familiar with the functions and role of the Liaison Officer. This course includes the flow of information between command and all agencies involved in the incident, solving problems with the various agencies involved in the incident, and the difference between assisting and cooperating agencies. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).</td>
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<tr>
<td>FTWO 145</td>
<td>INCIDENT COMMANDER S-400</td>
<td>2</td>
<td>CR/NC</td>
<td>I</td>
<td>36 lecture</td>
<td>This course of study presents the duties and functions of the wildland fire Incident Commander. This includes how to set up organizational elements necessary to mitigate the emergency, request additional resources as needed, how to ensure planning meetings are held as necessary, details relating to coordination of staff activity, and how and when to assume command of an incident after the overall situation is reviewed, sufficient information is available to make logical decisions, and takeover coordination can be accomplished. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).</td>
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<tr>
<td>FTWO 146</td>
<td>LIAISON OFFICER S-402</td>
<td>.5</td>
<td>CR/NC</td>
<td>I</td>
<td>12 lecture</td>
<td>This course of study presents the information necessary for the student to become familiar with the functions and role of the Liaison Officer. This course includes the flow of information between command and all agencies involved in the incident, solving problems with the various agencies involved in the incident, and the difference between assisting and cooperating agencies. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).</td>
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*F* and *S* indicate semester course is usually offered. *I* indicates course may not be offered every year.

Subject to change. Check the current class schedule.
**FTWO 147**  
**SAFETY OFFICER S-404** – 2 Units (CR/NC Option) (I)  
**Class Hours:** 36 lecture total  
This course of study presents the necessary information that is required for an individual to function as a Safety Officer on a wildland fire incident. This course includes how to make recommendations that will address those risks or hazards with the highest potential for accidents or incidents and follow through with those of lesser degree, how to develop and present alternatives, and present issues related to direct intervention to immediately correct a dangerous situation. **Note:** While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

**FTWO 148**  
**STANDARDS FOR SURVIVAL PMS-416** – .5 Unit (CR/NC Option) (I)  
**Class Hours:** 9 lecture total  
This course of study presents the introductory information for wildland firefighters on the safety aspects of how to fight fire aggressively but provide for safety first. This course includes information on how to initiate all action based on current and expected fire behavior, how to recognize current weather conditions and obtain forecasts, obtain current information on fire status, and to remain in communication with crew members, your supervisor, and adjoining forces. **Note:** While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

**FTWO 149**  
**HAZARDOUS MATERIALS AWARENESS PROGRAM FOR FIREFIGHTERS PMS-418** – .5 Unit (CR/NC Option) (I)  
**Class Hours:** 9 lecture total  
This course of study prepares the student to respond to a Haz-Mat incident in a safe and competent manner and be able to function at an operational level. **Note:** While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

**FTWO 150**  
**COMMAND AND GENERAL STAFF S-420** – 2 Units (CR/NC Option) (I)  
**Class Hours:** 36 lecture total  
This course of study presents advanced training for those individuals who will be assigned to the Command and General Staff positions on a wildland fire incident. This course presents topics that will develop the skills and knowledge that are necessary to perform on wildland Type 2 incidents in a command or general staff position, information required to set up organizational elements necessary to mitigate a wildland fire incident, how to request additional resources as needed, and supervision issues related to coordination of staff activity. **Note:** While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

**FTWO 151**  
**LOOK UP, LOOK DOWN, LOOK AROUND PMS-427** – .5 Unit (CR/NC Option) (I)  
**Class Hours:** 9 lecture total  
This course of study is a wildland fire behavior refresher for experienced wildland firefighters. It presents the three principle environmental elements affecting wildland fire behavior, three factors of fuel that affect the start and spread of wildland fire, three factors of weather that affect fuel moisture, how wind affects wildland fire spread, four factors of topography that affect wildland fire behavior, and descriptions of the dangerous conditions that can develop in a box canyon and steep narrow canyons. **Note:** While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

**FTWO 152**  
**LEARN TO BEHAVE PMS-428** – .5 Unit (CR/NC Option) (I)  
**Class Hours:** 12 lecture total  
This course of study, “The BEHAVE” fire behavior prediction and fuel modeling system is a set of interactive, user-friendly computer programs. It is a flexible system that can be adapted to a variety of specific wildland fire management needs. BEHAVE is ideally suited to real-time predictions of the behavior of wildfires or prescribed natural fires. **Note:** While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).
FTWO 154 OPERATIONS SECTION CHIEF S-430 – 1 Unit (CR/NC Option) (I)
Class Hours: 18 lecture total
This course of study presents the information necessary to meet the training requirements of the Operations Section Chief. This course presents the information necessary to assess incident assignments and determine immediate needs and actions, a description of the six principles of command and the six basic rules of emergency operations management, delineation of the relationship between General Staff and the Operations Section Chief, and supervision of the operations function. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web site (NIFC.gov).

FTWO 155 INCIDENT TRAINING SPECIALIST S-445 – 1 Unit (CR/NC Option) (I)
Class Hours: 18 lecture total
A course of study that presents the information needed to organize and implement an incident training program. This course includes how to analyze and prescribe training assignments to fulfill individual development needs of trainees, and to properly document individual trainee performance and the incident training program. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web site (NIFC.gov).

FTWO 156 AIR OPERATIONS BRANCH DIRECTOR S-470 – 1.5 Units (CR/NC Option) (I)
Class Hours: 27 lecture total
This course of study presents a detailed study of the ICS Aviation Organization. It includes understanding the latest Regional Aviation Program and direction, the ability to apply the latest aviation tools and equipment used in the suppression of wildfires, application of the principles of safety when using aviation resources, recognition of the importance of following aviation regulation when using call-when-needed aircraft, and the interaction among the aviation organization on an incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web site (NIFC.gov).

FTWO 157 ADVANCED WILDLAND FIRE BEHAVIOR CALCULATIONS S-490 – 2 Units (CR/NC Option) (I)
Class Hours: 40 lecture total
This course of study is the fourth National Wildfire Coordinating Group course in wildland fire behavior. This course is designed to give state-of-the-art capability to determine inputs for fire behavior determination and in-depth knowledge of interpretations of model outputs. The material presented teaches participants to project fire perimeter growth based on weather predictions and knowledge of fuels and topography. A variety of fire scenarios are presented for participants to make fire behavior calculations and interpretations. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web site (NIFC.gov).

FTWO 158 FACILITATIVE INSTRUCTOR PMS-925 – 2 Units (I)
Class Hours: 40 lecture total
This course of study is to provide experienced wildland firefighting personnel with technical competence in fire management and other disciplines to become effective adult education instructors. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web site (NIFC.gov).

FTWO 160 HAZARDOUS MATERIALS FIRST RESPONDER UPDATE – .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
This course of study prepares the student to respond to a Hazardous Materials incident in a safe and competent manner and be able to function at an operational level. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web site (NIFC.gov).

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FTWO 161 MEDICAL FIRST RESPONDER UPDATE – .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
This course of study meets California Code of Regulations Title 22 requirements that all personnel that respond to any emergency incidents must be trained in first aid. Further requirements in California Code of Regulations, Title 22 require an annual refresher course to maintain competency. This course meets these re-certification requirements. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 162 CAMPBELL PREDICTION SYSTEM – 1 Unit (CR/NC Option) (I)
Class Hours: 18 lecture total
A course of study that provides an understanding of the fuel flammability issue in predicting wildland fire behavior. The course presents information on how to predict fire behavior in wildland fire situations using flammability variations by time and aspect, learn how to analyze fire situations, to communicate evaluations, and to use logic in making field fire behavior predictions, and to develop the ability to display and communicate the fire potential. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FIRE TECHNOLOGY/WILDLAND FIRE TECHNOLOGY PREVENTION (FTWP)

FTWP 110 PRESCRIBED FIRE FOR BURN BOSSES RX-300 – 3 Units (CR/NC Option) (I)
Class Hours: 44 lecture/36 lab total
This course of study identifies the requirements and components for developing burn prescriptions and operational plans. It includes identification of burning techniques that need be applied to meet burn plan requirements, and how to execute the operational plan by meeting local management objectives, smoke dispersal, and visibility objectives within public health standards. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 111 INTRODUCTION TO WILDFIRE PREVENTION P-101 – .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
This course of study is to provide the student with an introduction to wildland fire prevention. The role of wildland fire prevention continues to be important in order to mitigate unplanned ignitions, prevent loss of life, and reduce undesirable damages to property and natural resources. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 112 INSPECTING FIRE PRONE PROPERTY P-110 – .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
This course of study is to provide the student who has little or no experience in inspecting property, how to conduct inspections of fire prone property, including houses and surrounding structures in forested or rural areas. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 113 CALIFORNIA BASIC FIRE PREVENTION P-140 – 2 Units (CR/NC Option) (I)
Class Hours: 36 lecture total
This course of study presents the information necessary for the student to be able to function as a fire prevention technician in the prevention of wildland fires. This course presents the responsibilities of fire prevention personnel, the role of Cooperative Forest Fire Prevention, development of a sign and poster plan, interagency cooperation, the role of the National Fire Danger Rating System and fire prevention, and how to conduct inspections of residential and commercial operations. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).
FTWP 114 WILFIRE ORIGIN AND CAUSE DETERMINATION P-151 – 1.5 Units (CR/NC Option) (I)

Class Hours: 36 lecture total

This course of study provides the introductory information necessary for the student to be able to function as a Public Information Officer on a non-complex wildland fire. This course includes a description of the duties and responsibilities of a Type 3 Information Officer, the kinds and sources of information needed, how to gather and distribute information to meet the needs of print and electronic media, internal audiences, cooperators, communities, landowners, homeowners, local government leaders, and the steps and materials needed to operate an information center and field work site. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 115 INTRODUCTION TO INCIDENT INFORMATION S-203 – 2 Units (CR/NC Option) (I)

Class Hours: 36 lecture total

This course of study presents additional wildland fire prevention information required for the fire prevention technician. The materials presented include application of federal and state fire laws, an overview of national and regional fire prevention programs and their focus for the future, and an overview of fire prevention planning and its significant components at district and forest level. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 117 INTERMEDIATE FIRE PREVENTION P-240 – 2 Units (CR/NC Option) (I)

Class Hours: 36 lecture total

This course of study presents additional wildland fire prevention information required for the fire prevention technician. The materials presented include application of federal and state fire laws, an overview of national and regional fire prevention programs and their focus for the future, and an overview of fire prevention planning and its significant components at district and forest level. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 120 WILDLAND FIRE PREVENTION PLANNING P-301 – 2 Units (CR/NC Option) (I)

Class Hours: 36 lecture total

This course of study is designed for fire managers, fire prevention specialists and planners, and other persons who have fire prevention planning responsibility. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 121 WILDLAND FIRE PREVENTION MARKETING P-303 – 2 Units (CR/NC Option) (I)

Class Hours: 36 lecture total

This course of study is designed to provide the field Fire Prevention Specialist with the necessary tools to develop a wildfire prevention-marketing plan. It includes methods to generate ideas and provide information to assist in the development of a successful wildfire prevention-marketing program. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 122 ADVANCED FIRE PREVENTION P-340 – 2 Units (CR/NC Option) (I)

Class Hours: 36 lecture total

This course of study presents advanced techniques for the wildland fire prevention officer. It includes a definition of fire’s role in ecosystem management, application of the principles of ecology, sociology, economics, communications, and marketing, to the development and implementation of a fire protection plan, and demonstrate how to gain support for the fire protection plan from management and adjacent landowners. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.

Subject to change. Check the current class schedule.
FTWP 123  INTRODUCTION TO FIRE EFFECTS RX-340 – 2 Units (CR/NC Option) (I)

Class Hours: 36 lecture total
This course of study presents an understanding of land use activity and controlled fire situations. This course includes a description of fire as an ecological process, applications and limitations of fire use, first order fire effects and how to measure them, and the interaction of fire characteristics on natural and cultural resources components that determines first order fire effects. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 124  INFORMATION OFFICER S-403 – 2 Units (CR/NC Option) (I)

Class Hours: 36 lecture total
This course of study presents the information necessary for the student to be able to function as an Information Officer in a wildland fire. The course includes news release issues, inquiries from media, participate in briefings, meetings, special sessions as a member of the incident management team, and prepare and disseminate information internally to personnel on incident and appropriate agency offices. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWP 126  SMOKE MANAGEMENT TECHNIQUES RX-410 – 2 Units (CR/NC Option) (I)

Class Hours: 36 lecture total
This course of study is for experienced Prescribed Fire Managers and Prescribed Fire Behavior Analysts, and presents in detail the legal, professional, and ethical reasons for managing smoke. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FIRST AID/CPR/EMT (FAID)

FAID 130  PUBLIC SAFETY FIRST AID (EMS) – 1 Unit (I)

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  FIRST RESPONDER (EMS) – 3 Units (F/S)

Note: A State or local certification as an EMT is not allowed unless the student is 18+ years old, has a valid Professional Rescuer CPR Certificate, passes a recognized EMT Course, has not been convicted of specific crimes and completes an additional state/local EMS authority written exam.

Class Hours: 54 lecture/9 lab total
This course teaches techniques in emergency medical care for the First Responder, which includes Automatic External Defibrillator training. This course also meets Public Safety Training Standard covered by the U.S. Department of Transportation curriculum and approved by the local EMS agency. Note: Students may make application through Nor Cal E.M.S. for certification.

FAID 133  CERTIFICATION CPR FOR THE PROFESSIONAL RESCUE – .5 Unit (CR/NC Option)

Class Hours: 9 lecture total
Note: Meets criteria for either the American Red Cross or American Heart Association
This course will cover CPR and how to treat for foreign body obstruction in adults, children, and infants. Designed for the professional rescuer. Upon successful completion of this course, students may apply to be certified in CPR by the agency having jurisdiction.

FAID 134  RECERTIFICATION CPR FOR THE PROFESSIONAL RESCUE – .5 Unit (CR/NC Option)

Class Hours: 9 lecture total
This course will cover CPR and how to treat for foreign body obstruction in adults, children, and infants. Designed for the professional rescuer who needs recertification. Upon successful completion of this course, students may apply to be re-certified in CPR by the agency having jurisdiction.
FAID 175  EMERGENCY MEDICAL TECHNICIAN 1 BASIC – 3.5 Units (F/S)

Notes: 1. 10 hours of observation time at a hospital emergency room or on an ambulance will be required.
2. State or local certification as an EMT is not allowed unless the student is 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 or specific crimes and completes an additional state/local EMS authority written exam.
3. This class meets for additional time “outside” of the scheduled weekly meeting time. This may include Saturdays, Sundays or night shifts. Students are required to purchase or provide items such as safety clothing, BBP protection supplies, gloves, safety glasses, etc.
4. Students will need to submit proof of a current TB skin test, Hepatitis B vaccination or declination, MMR less than 8 years old, Tetanus less than 10 years old, and either past history of, or a titer for Varicella (Chicken Pox), before participating in any ride-along as mandated by AMR.

Class Hours: 36 lecture/81 lab (includes 63 hours of skills training and 18 hours auto extrication)
An intensive course to assist the student with developing skill in recognition of symptoms of illness and injuries, and proper procedures in emergency care. Course is approved by Northern California Emergency Medical Services, Inc. Upon successful completion of the course, students may make application through Northern California Emergency Medical Services, Inc. for certification. (NCEMS, Inc., requires a minimum grade of 80 percent or better on the Certification Examination for certification.)

FAID 178  EMT RECERTIFICATION/FIRST RESPONDER – 1 Unit (F/S)

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. for the purpose of EMT recertification. Upon successful completion of the course, the student may make application through Northern California Emergency Medical Services, Inc. for re-certification. (NCEMS, Inc. requires a minimum grade of 80 percent or better on the Certification Examination for re-certification.) Note: This course may also be taken to satisfy the requirement for recertification as a first responder. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FAID 197  SPECIAL TOPICS IN FIRST AID/CPR/EMT – .5-2 Units (I)

Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in first aid/CPR/EMT. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

FAID 198  SPECIAL SKILLS TOPICS IN FIRST AID/CPR/EMT – .5-2 Units (CR/NC Option)

Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in first aid/CPR/EMT. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

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 (CAN # FREN 2) (FREN SEQ A) (CR/NC Option) (F/S)

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 eating and foods. Also, students are introduced to the culture of French-speaking people.

FREN 2  ELEMENTARY FRENCH – 5 Units (CAN # FREN 4) (FREN SEQ A) (CR/NC Option) (S)

Prerequisite: A grade of C or higher in FREN 1 or Foreign Language Placement Level 2 or higher
Class Hours: 90 lecture total
In this continuation of Elementary French, there is continued emphasis on listening to oral French and on speaking the language, along with writing and reading French. Students expand their language skills and vocabulary, improving their ability to ask and answer questions, to discuss daily life, events in the past or present, travel, leisure-time activities and shopping. Students will read short texts about French history and culture, as well as watch videos about French-speaking countries.

FREN 3  INTERMEDIATE FRENCH – 3 Units (CAN# FREN 8) (FREN SEQ B) (CR/NC Option) (F)

Prerequisite: A grade of C or higher in FREN 2, or Foreign Language Placement Level 3 or higher
Class Hours: 54 lecture total
A thorough review of basic communication skills (speaking, listening, reading, and writing) and formal study of the patterns of French. Students continue to strengthen their speaking skills as they work toward mastery of the language. The course includes reading expository writing along with pieces of French literature.

"F" and “S” indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.
FREN 4  INTERMEDIATE FRENCH – 3 Units (CAN# FREN 10) (FREN SEQ B) (CR/NC Option) (S)
Prerequisite: A grade of C or higher in FREN 3 or Foreign Language Placement Level 4 or higher
Class Hours: 54 lecture total
The fourth semester of the language emphasizes conversation, contemporary literature, French culture and composition.
Reading selections include poetry, theatre, and journalistic expressions.

GEOGRAPHIC INFORMATION SYSTEMS (GIS)

GIS 10  INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (formerly NR 84) – 3 Units (CR/NC Option) (F)
Advisory: A grade of C or higher in GEOG 10 and a grade of C or higher in ENVR 52, or a grade of C or higher in CIS 1, or equivalent. (Basic computer skills include Windows, database, spreadsheet)
Class Hours: 36 lecture/54 lab total
This course is an introduction to Geographic Information Systems (GIS). Basic GIS concepts will be covered as well as sample applications of GIS to contemporary problems. Topics covered will include principles of spatial data and skills needed to utilize GIS. Use of existing data will provide a foundation for developing more advanced skills such as data retrieval, manipulation and analysis. In addition, students will learn methods of data acquisition and map productions. Practical applications of GIS to natural resources and other disciplines will be undertaken by students. This course is intended as an overview of GIS with laboratory time focused on hands-on GIS skills. ESRI ArcView software will be used in the class.

GIS 11  ADVANCED GEOGRAPHIC INFORMATION SYSTEMS – 3 Units (S)
Prerequisite: A grade of C or higher in GIS 10
Advisory: A grade of C or higher in GEOG 10
Class Hours: 36 lecture/54 lab total
This course is intended to provide students with a survey of some of the more advanced GIS capabilities, building upon skills developed in GIS 10. GIS analysis will be explored in greater depth, including networks analysis. Students will work with imagery, digital photos and grid data. The growing integration of GIS with the Internet will also be explored. Finally, students will design and implement a GIS project for the course.

GIS 12  DATABASES FOR GEOGRAPHIC INFORMATION SYSTEMS (GIS) (formerly NR 82) – 2 Units (S)
Class Hours: 18 lecture/54 lab total
This course covers database principals, structure and processes as they apply to geographic information systems (GIS). Data management is a critical aspect of GIS. Students will work with various data to learn database fundamentals such as design indexing, access, and reports. Integration of non-spatial data with GIS data will be a key component of the course. Microsoft Access database management and Arc View GIS software will be used in the course.

GIS 13  MOBILE GIS/GPS – 1 Unit (CR/NC Option) (F/S)
Advisory: A grade of C or higher in GIS 90 or a grade of C or higher in GIS 10
Class Hours: 9 lecture/27 lab total
This course will serve as an introduction to Mobile GIS/GPS technology. Students will learn Mobile GIS/GPS theory and practice, including the use of GPS hardware and related software necessary to collect and process field data. The design and implementation of geographic databases suitable for GPS field applications will also be covered. GPS field data will be post-processed for higher accuracy, and used to update previously existing GIS layers. Students will understand basic GPS theory and be able to perform best practices while in the field to acquire accurate data. Students will become familiar with a mix of Trimble GPS equipment and supporting software (ESRI ArcPad, ArcMap, Trimble Pathfinder Office).

GIS 90  WORKING WITH GEOGRAPHIC INFORMATION SYSTEMS (GIS) (formerly NR 80) – 1 Unit (CR/NC Option) (F/S)
Class Hours: 18 lecture/6 lab total
This course gives students a basic introduction to working with geographic information systems (GIS). ArcView (ESRI, Inc) will be used to introduce students to viewing and manipulating GIS data and processing maps. Students will learn about the many applications of GIS by looking at case studies.

GIS 94  GEOGRAPHIC INFORMATION SYSTEMS WORKSITE LEARNING – 1-4 Units (F/S)
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.
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**GEOL 1**  
**PHYSICAL GEOLOGY (formerly GEOL 1A) – 4 Units (CAN# GEOL 2) (F)**

**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.

**GEOL 2**  
**HISTORICAL GEOLOGY (formerly GEOL 1B) – 4 Units (I)**

**Prerequisite:** A grade of C or higher in GEOL 1, or GEOL 5, or GEOL 6, or GEOL 7, or GEOL 10, or PHSC 2, or PHSC 5, or PHSC 7  
**Note:** Required day and overnight field trips.  
**Class Hours:** 54 lecture/108 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.

**GEOL 3**  
**MINERALOGY AND CRYSTAL OPTICS – 5 Units (F)**

**Prerequisite:** A grade of C or higher in GEOL 1  
**Corequisite:** Students must be concurrently enrolled in, or have previously completed CHEM 1A with a grade of C or higher  
**Class Hours:** 54 lecture/108 lab total  

An exploration into the chemistry, classification, optics and crystalline structure of minerals. Topics covered in the course will include the chemistry, bonding, and crystalline structure of minerals, recognition of crystal types, physical properties of minerals, mineral classification as well as their origins, occurrence, and use, and an introduction to the theory of optical identification of minerals. Laboratory activities will include crystallography, physical properties testing, mineral classification, and optical techniques to identify mineral crystals with an introduction to uniaxial and biaxial minerals.

**GEOL 4**  
**ROCK ORIGINS AND RELATIONSHIPS – 4 Units (S)**

**Prerequisite:** A grade of C or higher in GEOL 2 and a grade of C or higher in GEOL 3  
**Note:** Required 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.

**GEOL 5**  
**INTRODUCTION TO GEOLOGY – 4 Units (F/S)**

**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, lecture hours will total 162*)  

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 on natural resources consumption on society, and the economic geology and exploration for ores and petroleum deposits.

**GEOL 6**  
**ANCIENT LIFE – 4 Units (F/S)**

**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 ecologic reconstruction, mass extinction and adaptive radiation, fossilization, and ancient geographic distributions of flora and fauna. Anatomical innovations that define major classes of organisms are traced through ancestor-descendant relationships. Laboratory exercises include processes of fossilization, fossil recognition, cladistic analysis, genetics, stratigraphy, reconstruction of ancient biologic communities, ancient geographic reconstruction through fossil information, functional morphology, mass extinction and adaptive radiation in the fossil record. This course may be offered in a distance learning format. This course may be offered in a distance learning format.
GEOL 7  INTRODUCTION TO THE GEOLOGY OF CALIFORNIA (formerly GEOL 25) – 4 Units (I)

Note:  Required field trips (day trips and overnight trips)
Class Hours:  54 lecture/54 lab total

As the newest material added to North America, California geology records ancient and continued mountain building which has shaped the state into landforms and geologic features. Each geomorphic province in California records unique rock packages indicative 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.

GEOL 8  PLANETARY GEOLOGY: DEVELOPMENT, HISTORY & PLANETARY PROCESSES (formerly GEOL 22) – 3 Units (I)

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.

GEOL 9  EARTHQUAKES, VOLCANOES, AND OTHER GEOLOGIC HAZARDS (formerly GEOL 20) – 3 Units (I)

Note:  Required day field trips
Class Hours:  54 lecture total

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.

GEOL 10  ENVIRONMENTAL GEOLOGY (formerly GEOL 40) – 4 Units (I)

Note:  Required day 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.

GEOL 11  ECONOMIC GEOLOGY – 3 Units (I)

Prerequisite: A grade of C or higher in GEOL 1 and a grade of C or higher in GEOL 3
Note:  Required field trips.
Class Hours:  36 lecture/54 lab total

An introduction to economic deposits, their origins and associations, and recovery. This course will review the basic geological concepts in the context of economic deposits and then apply those concepts to exploration, evaluation, and recovery. Industrial and precious metals as well as fossil fuels (oil, gas, and coal) will provide the main focus of the course. Exploration techniques in geophysics, remote imagery, and computer-aided analysis will also be considered. Laboratory exercises will evaluate material for its economic potential using the identification of mineral and rock associates, geologic maps and remote images, and geophysical techniques and data collection. Additionally, the volume, value, and recovery costs of an ore deposit will be reviewed.

GEOL 23  INTRODUCTION TO GEOLOGY IN THE FIELD (formerly GEOL 13AB) – 2 Units (CR/NC Option) (F/I)

Prerequisite: A grade of C or higher in GEOL 1, or GEOL 5, or GEOL 6, or GEOL 7, or GEOL 10, or PHSC 2 and a grade of C or higher in GEOL 2
Note:  Includes required day field trips.
Class Hours:  27 lecture/27 lab total

An introduction to methods used to collect and interpret geologic data. Lecture sessions will provide theory and background for field excursions as well as compilation periods to devise interpretations, assemble geologic summary reports, graphics, and maps. Emphasis will be placed on field equipment and its use, outcrop examination and interpretation, rock and mineral identification, utilization of topographic maps, utilization and construction of geologic maps and cross sections, construction of stratigraphic columns, utilization of aerial and satellite imagery, recognition and interpretation of geologic structures, and recognition and interpretation of primary and secondary features in outcrops and different rock types. Two or more field sites will provide the focus of the course.

*"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.*
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Option</th>
<th>Prerequisite</th>
<th>Note</th>
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</thead>
<tbody>
<tr>
<td>GEOL 26</td>
<td>GEOLOGY OF THE NORTH COAST RANGES (formerly GEOL 26AB)</td>
<td>2</td>
<td>(CR/NC Option)</td>
<td>(F/I)</td>
<td>A grade of C or higher in GEOL 1, or GEOL 5, or GEOL 6, or GEOL 7, or GEOL 10, or PHSC 2</td>
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<td>Includes two required overnight field trips.</td>
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<td>Class Hours: 27 lecture /27 lab total</td>
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<tr>
<td>GEOL 27</td>
<td>GEOLOGY OF THE KLAMATH MOUNTAINS (formerly GEOL 27A)</td>
<td>2</td>
<td>(CR/NC Option)</td>
<td>(F/I)</td>
<td>A grade of C or higher in GEOL 1, or GEOL 5, or GEOL 6, or GEOL 7, or GEOL 10, or PHSC 2</td>
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<td>Two overnight field trips are required</td>
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<td>Class Hours: 27 lecture/27 lab total</td>
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<tr>
<td>GEOL 32</td>
<td>GEOLOGY OF THE NORTHERN SIERRAS – 1 Unit (CR/NC Option)</td>
<td>1</td>
<td>(I)</td>
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<td>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-ledge” economic geology. Field trip exercises will also be conducted at various stops.</td>
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<td>Note: Required overnight field trip.</td>
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<td>Class Hours: 9 lecture /27 lab total</td>
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<tr>
<td>GEOL 33</td>
<td>GEOLOGY OF THE SACRAMENTO VALLEY (formerly GEOL 27B)</td>
<td>1</td>
<td>(I)</td>
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<td>An introduction to the geology of the Sacramento Valley which will culminate with a two-and-a-half day 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.</td>
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<td>Note: Required overnight field trip.</td>
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<td>Class Hours: 9 lecture/27 lab total</td>
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<td>GEOL 34</td>
<td>GEOLOGY OF THE MODOC PLATEAU (formerly GEOL 61AB)</td>
<td>1</td>
<td>(I)</td>
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<td>An introduction to the geology of the Modoc Plateau which will culminate with a two-and-a-half day 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.</td>
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<td>Class Hours: 9 lecture/27 lab total</td>
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<td>GEOL 35</td>
<td>GEOLOGY OF LASSEN VOLCANIC PARK (formerly GEOL 62AB)</td>
<td>1</td>
<td>(I)</td>
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<td>An introduction to the geology of Lassen Volcanic Park which will culminate with a two-and-a-half day 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.</td>
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<td>Class Hours: 9 lecture/27 lab total</td>
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<td>GEOL 36</td>
<td>GEOLOGY OF MOUNT SHASTA AND VICINITY (formerly GEOL 64AB)</td>
<td>1</td>
<td>(I)</td>
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<td>An introduction to the geology of Mount Shasta and surrounding areas which will culminate with a two-and-a-half day 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.</td>
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<td>Class Hours: 9 lecture/27 lab total</td>
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<tr>
<td>GEOL 37</td>
<td>GEOLOGY OF THE NORTHERN CALIFORNIA COAST – 1 Unit (CR/NC Option)</td>
<td>1</td>
<td>(I)</td>
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<td>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 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, erosional and depositional processes, active mountain building, and geomorphology. Field trip exercises will also be conducted at various stops.</td>
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<td>Class Hours: 9 lecture/27 lab total</td>
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GEOL 38  GEOL 38  GEOL 38  GEOL 38
GEOPHYSICS – 1 Unit (CR/NC Option) (I)

Note: Required overnight field trip.
Class Hours: 9 lecture/27 lab total

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 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.

GEOL 42  GEOL 42  GEOL 42  GEOL 42
GEOLOGY OF THE REDDING AREA (formerly GEOL 100) – .5 Unit (CR/NC Option) (I)

Note: Required day field trips.
Class Hours: 9 lecture/8 lab total

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 during a single 8-hour outing.

GEOL 43  GEOL 43  GEOL 43  GEOL 43
GEOLOGY OF THE SHASTA LAKE AREA (formerly GEOL 102) – .5 Unit (CR/NC Option) (I)

Note: Required day field trip.
Class Hours: 9 lecture/8 lab total

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 a single 8-hours outing.

GEOL 44  GEOL 44  GEOL 44  GEOL 44
GEOLOGY OF THE WHISKEYTOWN AREA – .5 Unit (CR/NC Option) (I)

Note: Required day field trip.
Class Hours: 9 lecture/8 lab total

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 a single 8-hour outing.

GEOL 45  GEOL 45  GEOL 45  GEOL 45
GEOLOGY OF CASTLE CRAGS AND VICINITY – .5 Unit (CR/NC Option) (I)

Note: Required day field trip.
Class Hours: 9 lecture/8 lab total

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 a single 8-hour outing.

GEOL 46  GEOL 46  GEOL 46  GEOL 46
GEOLOGY OF BURNEY FALLS AND VICINITY – .5 Unit (CR/NC Option) (I)

Note: Required day field trip.
Class Hours: 9 lecture/8 lab total

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 a single 8-hour outing.

GEOL 97  SPECIAL TOPICS IN THE GEO SCIENCES – .5-2 Units (I)

Note: Required field trips.
Class Hours: 9-36 lecture total

This course will provide students with a focused topic in the expanding fields of the geosciences. The topics chosen will be characterized by recent advances in the field and/or by multidisciplinary approaches to traditional subjects. Topics will vary with each course offering and will be listed in the schedule of classes. Since the subject matter of this course varies with each offering, this course is repeatable three times for a total of four enrollments.

GEOL 98  SPECIAL LAB TOPICS IN THE GEO SCIENCES – .5-1 Unit (I)

Note: Required field activities.
Class Hours: 27-54 lecture total

This course will provide students with an introduction to recent technological advances or multidisciplinary approaches to laboratory and field techniques in the geosciences. Topics will vary with each course offering and will be listed in the schedule of classes. Since the subject matter of this course varies with each offering, this course is repeatable three times for a total of four enrollments.

*F* and *S* indicate semester course is usually offered. *I* indicates course may not be offered every year. Subject to change. Check the current class schedule.
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 (CAN# GERM 2) (GERM SEQ A) (CR/NC Option) (F)**

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 (CAN# GERM 4) (GERM SEQ A) (CR/NC Option) (S)**

Prerequisite: A grade of C or higher in GERM 1, or Foreign Language Placement Level 2 or higher  
Class Hours: 90 lecture total  
This course takes the student on to a more proficient level of German. Comprehension and speaking levels are increased through participation in many oral activities (role playing, skits, plays, etc). Further information on culture and traditions are provided, including information regarding Germany’s position in the world today.

**GERM 3**  
**INTERMEDIATE GERMAN – 3 Units (CR/NC Option) (CAN # GERM 8) (GERM SEQ B) (I)**

Prerequisite: A grade of C or higher in GERM 2 or Foreign Language Placement Level 3 or higher  
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher  
Class Hours: 54 lecture total  
This course is designed to give the student advanced training in German pronunciation, essentials of German grammar, reading, writing and speaking. Composition and literature are introduced. The student also learns about customs and culture of German-speaking people.

**GERM 4**  
**INTERMEDIATE GERMAN – 3 Units (CR/NC Option) (CAN # GERM 10) (GERM SEQ B) (I)**

Prerequisite: A grade of C or higher in GERM 3 or Foreign Language Placement Level 4  
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher  
Class Hours: 54 lecture total  
This course builds on the higher language skills acquired in GERM 3 with greater emphasis on the linguistic diversity of the language. Emphasis is placed on a more extensive study of composition and conversation together with greater stress on extensive reading in German literature.

GERONTOLOGY (GERO)

**GERO 24**  
**ETHNIC DIVERSITY AND AGING – 2 Units (CR/NC Option) (I)**

Class Hours: 36 lecture total  
This course examines general trends in minority aging with a look at how culture influences their utilization of services available. The role of diet and nutrition are studied. Topics include stereotypes, social bonds, environmental factors, sexuality, mental health, diet, nutrition, and utilization of available resources.

**GERO 64**  
**COPING WITH MENTAL ILLNESS AND DEMENTIA IN OLD AGE – 3 Units (CR/NC Option) (I)**

Class Hours: 54 lecture total  
This course provides a basis for those interested in understanding more about different mental health issues of individuals during the aging process. The course will explore how the healthy brain functions. Information will be given on how to identify mental disease in the elderly along with treatments available and interventions to provide them with a better quality of life. Topics include dementia, depression, stereotypes, social bonds, environmental factors, home modifications, caregiver options, medical interventions, and placement.

**GERO 75**  
**DEATH AND DYING – 2 Units (CR/NC Option) (I)**

Class Hours: 36 lecture total  
This course examines dying, death, and bereavement. History of dying and how Americans die today will be covered. Topics include social bonds, environmental factors, dying process, quality of life, cultural differences in death, ethical issues, and dealing with death.

**GERO 77**  
**FAMILY DYNAMICS AND AGING – 3 Units (CR/NC Option) (I)**

Class Hours: 54 lecture total  
This course examines older persons in a family context. The dynamics of family ties throughout life will be explored. Topics include the evolution of sibling relations and intimate ties will be covered, the costs and benefits of caregiver roles will be assessed as well as the effects of divorce and remarriage in later life.

HEALTH (HLTH)

**HLTH 1**  
**HEALTH AND WELLNESS (formerly PE 1, HPE 11) - 3 Units (CR/NC Option) (F/S)**

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.
HEALTH OCCUPATIONS (HEOC)

See Also: REGN, and VOCN

HEOC 94 HEALTH OCCUPATIONS WORKSITE LEARNING – 1-4 Units

Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.

Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)

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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

HEOC 100 PREPARING FOR A NURSING CAREER – 2 Units (F/S)

Class Hours: 36 Lecture total
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.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.
HEOC 101  NURSE UPDATE – 5 Units  (I)
Limitation on Enrollment: California Registered Nurse or Licensed Vocational Nurse
Class Hours: 54 lecture/108 lab total
This course has been designed to orient and update registered nurses and licensed vocational nurses on current techniques of nursing care including medications, i.v. therapy, nursing care plans and team leader duties. Supervised hospital experience will be conducted to prepare the RN/LVN to assume staff nurse duties upon completion of the course. The program allows for individual differences of learning. Approved for 30 hours Continuing Education credit.

HEOC 110  BEGINNING MEDICAL TERMINOLOGY (formerly MEDA 151) – 3 Units  (F/S)
Class Hours: 54 lecture total
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, blood and lymphatic and digestive system.

HEOC 111  ADVANCED MEDICAL TERMINOLOGY (formerly MEDA 152) – 3 Units  (F/S)
Prerequisite: A grade of C or higher in HEOC 110
Class Hours: 54 lecture total
This course is a continuation of HEOC 110 providing students with an understanding of medical terms used within the endocrine, special senses, urinary, male and female reproductive systems, and specialty areas such as Obstetrics, Pharmacology, Mental health, and Gerontology.

HEOC 152  CRITICAL CARE NURSING I (formerly HEOC 192AB) – 4 Units  (F/S)
Advisory: Designed for the Registered Nurse
Class Hours: 72 lecture total
Designed to provide registered nurses currently practicing or intending to practice in a critical care area with an in-depth knowledge base necessary to deliver optimal care to patients in the critical care units. This course will include a study of anatomy, physiology and pathophysiology of the cardiovascular, respiratory, renal and neurologic systems. Emphasis will be placed on assessment of the critical care patient and medical and nursing interventions in current practice. This course will heavily utilize the case study approach and practice of clinical application.

HEOC 153  CRITICAL CARE NURSING II (formerly HEOC 192CD) – 4 Units  (S)
Advisory: Designed for the Registered Nurse
Class Hours: 72 lecture total
Designed to provide registered nurses currently practicing or intending to practice in a critical care area with clinical application of the knowledge and skills required for critical care nursing. This course will include advanced problems related to cardiovascular, respiratory, renal, and neurologic systems and will heavily utilize the case study approach.

HEOC 154  CARDIAC CARE – 3 Units  (S)
Limitation on Enrollment: Registered Nurse or Licensed Vocational Nurse
Class Hours: 54 lecture total
This course is designed to provide the basic knowledge necessary to care for a patient in a cardiovascular unit. The content will include an overview of basic cardiac anatomy and physiology, basic dysrhythmia interpretation and the mechanisms responsible for their formation, 12 lead ECG interpretation, acute coronary syndromes, interventional cardiology, thrombolitics, cardiac surgery, valvular disorders, heart failure, cardiomyopathy, pacemakers, cardiovascular drugs and hemodynamics.

HEOC 159  PSYCHIATRIC NURSING – 3 Units  (F/S)
Note: Designed for Registered Nurse, Licensed Vocational Nurse, or Human Service Worker
Class Hours: 54 lecture total
This course is designed to provide a basic knowledge of psychiatric intervention for those nurses with only medical-surgical experience. It is also designed to provide skill improvement and updated information for the practicing psychiatric nurse as well as other human services workers. The content is designed to emphasize nursing assessment, care planning, therapeutic interventions specific to each diagnostic area, and current trends in practice.

HEOC 160  STRESS MANAGEMENT (formerly HEOC 185) – 2 Units  (F/S)
Class Hours: 36 lecture total
This class is designed to teach students the skills needed to recognize that all stressors affecting our actions are driven by our beliefs and values and how they affect the choices we make in dealing with stress. It will provide students with the opportunity to practice a variety of coping techniques that will assist them in making their lives less stressful. These techniques will include relaxation, the development of a support system, effective communication and listening. Students will gain the knowledge necessary to recognize their uniqueness and the importance of developing their personal power. Upon completion of this course, students will have the skills necessary to know how choices affect the quality of their lives and how to bring about positive life-style change.

HEOC 161  CE: PATIENT-FOCUSED COMMUNICATION (formerly HEOC 187, HEOC 198) - .5 Unit  (I)
Note: This course is approved by the State Department of Health Services to meet the continuing education hours required to maintain nurse assistant certification.
Class Hours: 9 lecture total
Designed to explore and improve the communication process as it relates to the delivery of patient care. Psycho-social factors influencing communication and the impact of sensory/cognitive impairments on communication will also be presented.
HEOC 162  C.E.: COMMUNICATION IN HEALTH CARE (formerly HEOC 187, HEOC 198) – .5 Unit (I)
Note: This course is approved by the State Department of Health Services to meet the continuing education hours required to maintain nurse assistant certification.
Class Hours: 9 lecture total
Designed to enhance knowledge of effective communication techniques and the influence of communication on staff relations. The importance of both verbal and written communication in the delivery of health care will be presented.

HEOC 166  BASIC OPHTHALMIC DISPENSING (formerly HEOC 166AB) – 2 Units (F)
Class Hours: 36 lecture total
This course is designed to prepare students for entrance into the ophthalmic dispensing field. This course will consist of lectures, videotapes, slides and films. No special materials are necessary.

HEOC 167  ADVANCED OPHTHALMIC DISPENSING AND ASSISTING (formerly HEOC 166CD) – 2 Units (S)
Prerequisite: A grade of C or higher in HEOC 166
Class Hours: 36 lecture total
This course is designed to assist students who are currently working in, or seeking to reenter, the ophthalmic dispensing field to improve their skills. This course will consist of lectures, videotapes, slides and films. No special materials are necessary.

HEOC 170  C.E.: CARING FOR THE PATIENT & THE CAREGIVER – 1 Unit (I)
Note: This course is designed to meet the continuing education requirements for the nurse aide in acute care, skilled care, intermediate care and home health.
Class Hours: 18 lecture total
The course content will assist the nurse aide in understanding the importance of caring for self while caring for others. Included topics will be caring for the caregiver, reducing nurse exposure to physical and disease hazards and meeting nurse and patient nutritional needs.

HEOC 171  C.E.: CARING FOR THE DYING PERSON (formerly HEOC 182) – .5 Unit (I)
Note: This course is approved by the State Department of Health Services to meet the continuing education hours required to maintain nurse assistant certification
Class Hours: 9 lecture total
Designed to explore the physical and psychosocial needs of the dying older adult. The nurse assistant role in caring for the dying person and the needs of their family members will be examined.

HEOC 172  C.E.: DEALING WITH DEATH (formerly HEOC 182) – .5 Unit (I)
Note: This course is approved by the State Department of Health Services to meet the continuing education hours required to maintain nurse assistant certification
Class Hours: 9 lecture total
Designed to teach students how to recognize the signs of approaching death. The patient self-determination act will be examined and its legal/ethical impact will be discussed. The student will be able to identify responsibilities related to post mortem care.

HEOC 173  C.E.: AGING, ILLNESS, AND BEHAVIOR (formerly HEOC 183) – .5 Unit (I)
Note: This course is approved by the State Department of Health Services to meet the continuing education hours required to maintain nurse assistant certification
Class Hours: 9 lecture total
Designed to explore the behavioral changes common to the aging population in the health care setting. The relationship between changes associated with aging and adjustment will be presented. The impact of illness on behavior and the influence of emotions on physical functioning will also be discussed.

HEOC 174  C.E.: COPING WITH PATTERNS OF BEHAVIOR (formerly HEOC 183) – .5 Unit (I)
Note: This course is approved by the State Department of Health Services to meet the continuing education hours required to maintain nurse assistant certification
Class Hours: 9 lecture total
Designed to examine common behavior problems encountered in the care of the aging resident. New skills will be presented which will guide the nurse assistant in practicing effective inter-personal relationships in the health care setting and home environment.

HEOC 176  C.E.: PHYSICAL CHANGES ASSOCIATED WITH AGING (formerly HEOC 184) – .5 Unit (I)
Note: This course is approved by the State Department of Health Services to meet the continuing education hours required to maintain nurse assistant certification
Class Hours: 9 lecture total
Designed to examine the health conditions common to the aging process. Recognizing the significance of vital sign values to wellness and illness will be emphasized. Topics to be discussed will include the role of the nursing assistant in caring for those with age-related respiratory and cardiovascular disorders.

HEOC 177  C.E.: AGE-RELATED HEALTH DISORDERS (formerly HEOC 184) – .5 Unit (I)
Note: This course is approved by the State Department of Health Services to meet the continuing education hours required to maintain nurse assistant certification
Class Hours: 9 lecture total
Designed to examine the role of the nursing assistant in caring for individuals with age-related health conditions. Common disorders of the endocrine, musculoskeletal and neurological systems will be presented.

*F* and *S* indicate semester course is usually offered. *I* indicates course may not be offered every year.
Subject to change. Check the current class schedule.
HEOC 180  NURSE AIDE/HOME HEALTH AIDE – 13 Units  (F/S)
Note: All students enrolling in a NA/HHA Program must be fingerprinted and cleared of all criminal convictions before they can be certified.
Class Hours: 144 lecture/288 clinical total
Course is designed to prepare students to perform the basic nursing skills required in acute hospitals, long-term care facilities, and home health agencies. Special emphasis is placed on health care provisions and modifications in the community health care settings. The State Department of Health Services approves this course, and certificates will be issued upon successful completion of the course. Students are then eligible to apply for the state competency examination for certification.

HEOC 181  NURSE AIDE – 9 Units  (Summer Session)
Note: All students enrolling in a NA Program must be fingerprinted and cleared of all criminal convictions before they can be certified.
Class Hours: 96 lecture/192 clinical total
This course is designed to prepare students to perform the basic skills required of a nurse aide. Course content consists of theory, laboratory, and clinical experience in long term care facilities. The course is approved by the State Department of Health Services. A certificate will be issued upon successful completion of the course. Students are then eligible to apply for the state competency examination for certification.

HEOC 186  HOME HEALTH AIDE - 3 Units  (I)
Limitation on Enrollment: Nurse Aide Certification
Class Hours: 36 lecture/48 lab total (2 weeks)
Designed to prepare Certified Nurse Assistants to perform the basic nursing skills required in the home. The State Department of Health Services has approved this course. Students will be awarded a certificate upon successful completion of the course.

HEOC 188  PREPARING FOR END-OF-LIFE CARE - 1 Unit  (F)
Class Hours: 18 lecture total
This course is designed to educate health care providers in the essential clinical competencies required to provide quality end-of-life care.

HEOC 190  TRANSITIONING TO HOME CARE - 1 Unit  (CR/NC Only)  (I)
Limitation on Enrollment: Registered Nurse or Licensed Vocational Nurse
Class Hours: 18 lecture total
This reality-based bridge course is designed to prepare nursing and rehabilitation staff currently working in the acute care setting to transition into the specialty of home care. Emphasis is placed on the unique skills and competencies required of the home health professional. The course will provide information regarding employment opportunities in this growing specialty.

HEOC 193  INTRODUCTION TO PERIOPERATIVE NURSING - 1 Unit  (I)
Limitation on Enrollment: Registered Nurse
Class Hours: 18 lecture total
This course is designed to provide the student with the knowledge to utilize the nursing process as it relates to the perioperative role. Classroom content emphasizes the theoretical basis for the practices of perioperative nursing.

HEOC 194  OBSTETRICAL NURSING UPDATE - 3 Units  (I)
Limitation on Enrollment: Registered Nurse
Class Hours: 54 lecture total
Designed to provide the student with updated knowledge to utilize the nursing process as it is related to the obstetrical role. Classroom content emphasizes the theoretical basis for the practices of current obstetrical nursing. Essential skills such as physical assessment of the expectant woman, fetal monitoring, assessment of the labor progress and concurrent management, along with assessment of high risk factors and appropriate labor management, VBAC deliveries, cesarean sections, postpartum and postoperative care for the new mother.

HEOC 197  PHARMACOLOGY FOR NURSES - 3 Units  (I)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
HEOC 197 is designed to enhance the pharmacological knowledge base of practicing nurses and nursing students. Utilizing a systems approach, pharmacological therapy is tied to the physiology and pathophysiology of the human body. The pharmacokinetics and pharmacodynamics of medications are explored. Therapeutic agents are broken down into drug classifications, names, actions, uses, side effects, and nursing concerns. Emphasis is placed on the bedside nurse’s role in the administration of medications.

HISTORY  (HIST)

HIST 1A  HISTORY OF WESTERN CIVILIZATION - 3 Units  (CR/NC Option)  (CAN# HIST 2)  (HIST SEQ A)  (F/S)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
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 learning format.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Advisory</th>
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<tbody>
<tr>
<td>HIST 1B</td>
<td>HISTORY OF WESTERN CIVILIZATION</td>
<td>3</td>
<td>CR/NC</td>
<td>A grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
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<td>(CR/NC Option) (CAN# HIST 4) (HIST SEQ A) (F/S)</td>
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<td>Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)</td>
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<td>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 learning format.</td>
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<td>HIST 2</td>
<td>WORLD CIVILIZATION TO 1500 C.E.</td>
<td>3</td>
<td>CR/NC</td>
<td>A grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
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<td>(CR/NC Option) (CAN# HIST 14) (F/S/I)</td>
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<td>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 learning format.</td>
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<tr>
<td>HIST 3</td>
<td>WORLD CIVILIZATION: 1500 to Present</td>
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<td>S</td>
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<td>(CR/NC Option)</td>
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<td>ESL 138 or ESL Placement Level 8</td>
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<td>Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)</td>
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<td>A survey of the development of the major civilizations of the world from 1500 to the present. The focus in on the political, economic, social, intellectual and religious forces present in the rise of Africa, the Americas, Asia and Europe from 1500 to the present day. The study of the dynamic interaction of peoples and cultures will give a multi-perspective view of world history. This course may be offered in a distance learning format.</td>
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<tr>
<td>HIST 17A</td>
<td>UNITED STATES HISTORY AND GOVERNMENT</td>
<td>3</td>
<td>CR/NC</td>
<td>A grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
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<td>(CR/NC Option) (CAN# HIST 8) (HIST SEQ B) (F/S)</td>
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<td>Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)</td>
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<td>A survey of the history of the United States from the discovery of America to the close of the Civil War. The exploration and settlement of America and the growth of a movement for independence are traced. The formation of a new nation and creation of the Constitution and its basic principles are described, as are the beginnings of the westward movement and the development of manifest destiny. The causes of the Civil War and the war itself are also examined. This course partially satisfies the State of California requirement in the U.S. Constitution and state and local governments. This course may be offered in a distance learning format.</td>
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<tr>
<td>HIST 17B</td>
<td>UNITED STATES HISTORY AND GOVERNMENT</td>
<td>3</td>
<td>CR/NC</td>
<td>A grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
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<td>(CR/NC Option) (CAN# HIST 10) (HIST SEQ B) (F/S)</td>
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<td>Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)</td>
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<td>This course traces the development of the problems of the Reconstruction Period, the movement toward regulation of the economic system, and the acceptance by the United States of world power and leadership. It discusses the causes and results of the Great Depression, the two world wars of the 20th Century, and the &quot;Cold War.&quot; This course partially satisfies the State of California requirement for course work in U.S. Constitution and the state and local government. This course may be offered in a distance learning format.</td>
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<td>HIST 25</td>
<td>AFRICAN AMERICAN HISTORY</td>
<td>3</td>
<td>CR/NC</td>
<td>A grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
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<td>(CR/NC Option)</td>
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<td>Class Hours: 54 lecture total</td>
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<td>Emphasizes the historical development, contributions, and present state of African American people in America. Begins with a survey of African civilizations, continues with the involvement of Europeans in the slave trade, the institution of slavery in America, the Reconstruction Period, and historical perspective of the Civil Rights Movement, the current urban crisis, and the varied philosophies of social change.</td>
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<td>HIST 35</td>
<td>HISTORY OF MEXICAN AMERICANS</td>
<td>3</td>
<td>CR/NC</td>
<td>A grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
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<td>Class Hours: 54 lecture total</td>
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<td>Traces the cultural, economic, literary, and political history of the Mexican and Mexican American in the U.S. up to the present. Focus will be on the development and nature of Mexican and Chicano culture and the Chicano movement, emphasizing especially significant historical movements and their contribution to understanding current cultural problems. Socioeconomic and political forces that shaped U.S. policies and practices in relation to the Mexican immigrant and Mexican Americans will be developed.</td>
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<tr>
<td>HIST 36</td>
<td>HISTORY OF THE FAR EAST</td>
<td>3</td>
<td>CR/NC</td>
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<td>(CR/NC Option) (F/S)</td>
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<td>Class Hours: 54 lecture total</td>
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<td>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.</td>
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<td>HIST 38</td>
<td>HISTORY OF WORLD RELIGIONS</td>
<td>3</td>
<td>CR/NC</td>
<td>A grade of C or higher in ENGL 190 or English Placement Level 6 or higher</td>
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<td>(CR/NC Option) (F/S)</td>
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<td>Class Hours: 54 lecture total</td>
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<td>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 learning format.</td>
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</table>

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year. Subject to change. Check the current class schedule.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>CR/NC Option</th>
<th>Timeframe</th>
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<tr>
<td>HIST 40</td>
<td>HISTORY AND GOVERNMENT OF CALIFORNIA</td>
<td>3</td>
<td>CR/NC Option</td>
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<td>Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher</td>
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<td>Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)</td>
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<td>A survey of the development of California from the Spanish period to the present day. Emphasis will be placed on contemporary development. The role of government is given particular attention. This course may be offered in a distance learning format.</td>
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<tr>
<td>HIST 55</td>
<td>HISTORY OF THE AMERICAN FRONTIER</td>
<td>3</td>
<td>CR/NC Option</td>
<td>(F/S)</td>
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<td>Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher</td>
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<td></td>
<td>Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)</td>
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<td>This course is designed to cover the aspects of frontier life from 1600 to 1900 in America. The course covers traditional attitudes such as manifest destiny and the Protestant ethic on the frontier, as well as policies of the frontier like the Indian policy after 1830. The course is broken down into eras of frontier movement and examines cultural evolution on the frontier. The course ends with a discussion of the &quot;Wild West&quot;, which is post-Civil War and culminates with acquisition of areas beyond the continental United States.</td>
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<tr>
<td>HIST 57</td>
<td>RUSSIAN HISTORY</td>
<td>3</td>
<td>CR/NC Option</td>
<td>(I)</td>
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<td></td>
<td>Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or ESL 138 or ESL Placement Level 8</td>
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<td>Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)</td>
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<td>This is a 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 learning format.</td>
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<tr>
<td>HIST 177</td>
<td>LOCAL HISTORY OF SHASTA COUNTY</td>
<td>3</td>
<td>CR/NC Option</td>
<td>(F)</td>
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<td>Class Hours: 54 lecture total</td>
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<td>This is a survey of Shasta County history. The course will include presentations on such topics as agriculture, water resources, lumbering, growth of electric power, county government, city government, Native Americans, mining, and growth of industry.</td>
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<tr>
<td>HIST 187</td>
<td>ORAL HISTORY OF SHASTA COUNTY</td>
<td>3</td>
<td>CR/NC Option</td>
<td>(I)</td>
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<td>Class Hours: 54 lecture total</td>
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<td>This is a course in experiencing Shasta County history through oral responses and commentary – interviews – with living people, with an emphasis on events, major industries, places and people. The class will hear presentations from people who are experts in their particular field. Students will learn how to collect and record history in order to preserve and facilitate research in history.</td>
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**HORTICULTURE (HORT)**

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<th>Course Title</th>
<th>Units</th>
<th>CR/NC Option</th>
<th>Timeframe</th>
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<tr>
<td>HORT 3</td>
<td>CAREER PLANNING FOR ORNAMENTAL HORTICULTURE</td>
<td>1</td>
<td>CR/NC Option</td>
<td>(F)</td>
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<td></td>
<td>Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher</td>
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<td>Class Hours: 18 lecture total</td>
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<td>This course addresses Ornamental Horticulture as a career and gives a preview of nursery, florist, and landscape industries. There will be discussion concerning requirements for the vocational A.A. degrees, certificate programs, and transfer to four-year degree colleges. It will also cover how best to apply for the job and how the student can prepare as a well-qualified candidate. The course will include discussion by area employers.</td>
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<td>HORT 7</td>
<td>HORTICULTURE CAREERS SURVEY AND PLACEMENT</td>
<td>1</td>
<td>CR/NC Option</td>
<td>(S)</td>
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<td>Note: One required four-day, three-night field trip</td>
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<td>Class Hours: 9 lecture/27 lab total</td>
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<td>This class is designed to give the student an overview of the California horticulture industry and how to obtain a job within the industry. This class includes a four-day, three-night tour of nurseries, florists, botanical gardens, universities and much more. On the tour, students will learn about many of the different careers the horticulture industry offers, meet perspective employers, and learn valuable job-seeking skills. Students will develop a career portfolio, life goals and plan of action. This class is required for all ornamental horticulture majors.</td>
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<tr>
<td>HORT 22</td>
<td>NURSERY PRACTICES AND PLANT PROPAGATION</td>
<td>2</td>
<td>CR/NC Option</td>
<td>(F)</td>
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<td></td>
<td>Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher; and a grade of C or higher in MATH 220, or Math Placement Level 1 or higher</td>
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<td>Class Hours: 18 lecture/54 lab total</td>
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<td>This course is required for all Environmental Horticulture Management majors. The methods and principles used in the propagation of plants, including both 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.</td>
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<tr>
<td>HORT 23</td>
<td>NURSERY PRACTICES AND MANAGEMENT</td>
<td>2</td>
<td>CR/NC Option</td>
<td>(S)</td>
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<td></td>
<td>Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher; and a grade of C or higher in MATH 220, or Math Placement Level 1 or higher</td>
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<td></td>
<td>Class Hours: 18 lecture/54 lab total</td>
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<td>This course is required for all Environmental Horticulture Management majors. This hands-on course will cover production schedules, marketing strategies, customer service, product displays, greenhouse and nursery management and much more. Best practices and economic feasibility will be emphasized.</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Advisory</td>
<td>Class Hours</td>
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<tr>
<td>HORT 26</td>
<td>PLANT PROTECTION <em>(formerly AGRI 26)</em></td>
<td>3</td>
<td>A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
<td>48 lecture/54 lab total</td>
</tr>
<tr>
<td>HORT 27</td>
<td>PLANT IDENTIFICATION AND TAXONOMY OF EVERGREEN TREES, SHRUBS AND GROUND COVERS</td>
<td>1</td>
<td>A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
<td>12 lecture/12 lab total</td>
</tr>
<tr>
<td>HORT 28</td>
<td>PLANT IDENTIFICATION AND TAXONOMY OF DECIDUOUS TREES, SHRUBS AND GROUND COVERS</td>
<td>1</td>
<td>A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
<td>12 lecture/12 lab total</td>
</tr>
<tr>
<td>HORT 29</td>
<td>PLANT IDENTIFICATION AND TAXONOMY OF TREES, SHRUBS AND GROUND COVERS</td>
<td>1</td>
<td>A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
<td>18 lecture/12 lab total</td>
</tr>
<tr>
<td>HORT 31</td>
<td>LANDSCAPE IRRIGATION <em>(formerly AGRI 31)</em></td>
<td>3</td>
<td>A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
<td>36 lecture/54 lab total</td>
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<tr>
<td>HORT 31.1</td>
<td>LANDSCAPE IRRIGATION – DESIGN</td>
<td>1</td>
<td>A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
<td>12 lecture/18 lab total</td>
</tr>
<tr>
<td>HORT 31.2</td>
<td>LANDSCAPE IRRIGATION – INSTALLATION</td>
<td>1</td>
<td>A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
<td>12 lecture/18 lab total</td>
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<tr>
<td>HORT 31.3</td>
<td>LANDSCAPE IRRIGATION – TROUBLESHOOT AND SCHEDULE</td>
<td>1</td>
<td>A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
<td>12 lecture/18 lab total</td>
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<tr>
<td>HORT 33</td>
<td>ENVIRONMENTAL HORTICULTURE <em>(formerly AGRI 33)</em></td>
<td>3</td>
<td>A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher</td>
<td>54 lecture total</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units (CR/NC Option)</td>
<td>Notes</td>
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<tr>
<td>HORT 34</td>
<td><strong>BEGINNING FLORAL DESIGN – FALL FLOWERS</strong></td>
<td>2 Units (CR/NC Option)</td>
<td>(F)</td>
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<td>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.</td>
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<td></td>
<td>Class Hours: 18 lecture/54 lab total</td>
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<td></td>
<td>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. <strong>Note:</strong> This course may be repeated one additional time for a total of 2 course enrollments since course content varies and skills are enhanced by supervised repetition and practice.</td>
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<td>HORT 35</td>
<td><strong>LANDSCAPE DESIGN</strong> (formerly AGRI 35)</td>
<td>3 Units (CR/NC Option)</td>
<td>(S)</td>
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<td></td>
<td>Class Hours: 36 lecture/54 lab total</td>
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<td>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.</td>
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<td>HORT 36</td>
<td><strong>FLORAL DESIGN FOR WEDDINGS AND SPECIAL OCCASIONS</strong></td>
<td>2 Units (CR/NC Option)</td>
<td>(F)</td>
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<td>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</td>
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<td></td>
<td>Class Hours: 18 lecture/54 lab total</td>
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<td>This course provides instruction in floristry skills pertaining to wedding 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 centerpiece.</td>
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<td>HORT 37</td>
<td><strong>NURSERY AND FLORIST MANAGEMENT</strong> (formerly AGRI 37)</td>
<td>3 Units (CR/NC Option)</td>
<td>(S)</td>
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<td></td>
<td>Class Hours: 54 lecture total</td>
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<td></td>
<td>The study of retail and wholesale florist operations. Specific areas that will be covered are management problems, public relations, advertising, financing, wire service, sales, display and merchandising.</td>
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<td>HORT 38</td>
<td><strong>LANDSCAPE AND TURF MANAGEMENT</strong> (formerly AGRI 38)</td>
<td>3 Units (CAN# AG-EH 28)</td>
<td>(S)</td>
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<td>Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher; and a grade of C or higher in MATH 220, or Math Placement Level 1 or higher</td>
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<td></td>
<td>Class Hours: 36 lecture/54 lab total</td>
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<td>This is a required course for Environmental Horticulture Management 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.</td>
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<td>HORT 39</td>
<td><strong>TROPICAL FLORAL DESIGN</strong></td>
<td>1.5 Units (CR/NC Option)</td>
<td>(I)</td>
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<td>Advisory: A grade of C or higher in HORT 34</td>
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<td>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.</td>
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<td>Class Hours: 27 lecture/9 lab total</td>
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<td>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.</td>
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<td>HORT 40</td>
<td><strong>INTERMEDIATE FLORAL DESIGN</strong> (formerly HORT 34CD)</td>
<td>2 Units (F/S)</td>
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<td>Prerequisite: A grade of C or higher in HORT 34</td>
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<td>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.</td>
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<td></td>
<td>Class Hours: 18 lecture/54 lab total</td>
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<td>Instruction in floristry skills related to contemporary styles of design for all occasions, wedding, and sympathy work. The application of techniques for mass and line style designs including Flemish, Oriental, parallel, contemporary, free-style, vegetative, and interpretive will be addressed. <strong>Note:</strong> This course may be repeated once for a total of two enrollments since the course content varies and skills are enhanced by supervised repetition and practice.</td>
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<td>HORT 41</td>
<td><strong>SELECTION AND CARE OF BLOOMING AND TROPICAL PLANTS</strong> (formerly HORT 135 and AGRI 135)</td>
<td>1.5 Units (CR/NC Option)</td>
<td>(F)</td>
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<td>Class Hours: 18 lecture/27 lab total</td>
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<td>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.</td>
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<td>HORT 44</td>
<td><strong>BEGINNING FLORAL DESIGN – SPRING FLOWERS</strong></td>
<td>2 Units (CR/NC Option)</td>
<td>(S)</td>
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<td>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.</td>
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<td>Class Hours: 18 lecture/54 lab total</td>
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<td>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. <strong>Note:</strong> This course may be repeated one additional time for a total of 2 course enrollments since course content varies and skills are enhanced by supervised repetition and practice.</td>
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</table>
HORT 45  HOLIDAY DECORATIONS AND BANQUETS - 1 Unit (CR/NC Option) (F)

Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.

Class Hours: 18 lecture/9 lab total

This course will offer in-depth instruction on the specific techniques and floral materials used in holiday design. Floral pieces specific to the fall and winter holidays will be created in class.

HORT 56  ORNAMENTAL HORTICULTURE PRACTICES (formerly HORT 56SV and AGRI 56SV) - 1-4 Units (F/S)

Class Hours: 54 hours per unit

This course is supplementary to the design and construction of a vineyard. A vineyard will be utilized as a resource for this class.

HORT 60  MASTER GARDENER TRAINING - 3 Units (CR/NR Option) (F)

Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6

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 course. 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.

HORT 70  ORGANIC GARDENING PRACTICES (SPRING) - 1 Unit (CR/NR Option) (S)

Note: This course is complementary to, but independent from organic gardening practices for summer (HORT 71) and fall (HORT 72) seasons.

Class Hours: 9 lecture/27 lab total

An introductory class emphasizing organic practices for the home garden/small farmer. This course covers spring vegetables, soils, fertility, irrigation and cultural practices. Students will be planting and maintaining a garden plot. Since subject matter varies with each seasonal crop, this course is complimentary to HORT 71 and HORT 72 which addresses gardening practices for summer and fall seasons.

HORT 71  ORGANIC GARDENING PRACTICES (SUMMER) - 1 Unit (CR/NR Option) (I)

Note: This course is complementary to, but independent from organic gardening practices for spring (HORT 70) and fall (HORT 72) seasons.

Class Hours: 9 lecture/27 lab total

Instruction includes summer crops, irrigation, pests and cultural practices for summer. Students will be planting and maintaining a garden plot. Subject matter in this course is supplementary to HORT 70 and HORT 72 which addresses gardening practices for spring and fall seasons.

HORT 72  ORGANIC GARDENING PRACTICES (FALL) - 1 Unit (CR/NR Option) (F)

Note: This course is complementary to, but independent from organic gardening practices for spring (HORT 70) and summer (HORT 71) seasons.

Class Hours: 9 lecture/27 lab total

This course covers the basics of planning, constructing and maintaining a water feature in the landscape. Topics will include; selection, care and propagation of water and bog plants, planning and construction of water feature and general maintenance of the water garden. Selection and care of fish will also be covered.

HORT 75  WATER GARDENING - 1 Unit (CR/NR Option) (S)

Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6

Class Hours: 9 lecture/27 lab total

This course covers the basics of planning, constructing and maintaining a water feature in the landscape. Topics will include; selection, care and propagation of water and bog plants, planning and construction of water feature and general maintenance of the water garden. Selection and care of fish will also be covered.

HORT 80  VINEYARD DESIGN AND CONSTRUCTION - 1 Unit (CR/NR Option) (S)

Class Hours: 18 lecture/9 lab total

An introductory course in establishing a commercial or home vineyard. Numerous principles will be covered with respect to the design and construction of a vineyard. A vineyard will be utilized as a resource for this class.

HORT 81  VINEYARD CARE - 1 Unit (CR/NR Option) (F)

Class Hours: 18 lecture/9 lab total

This is an introductory course for the care and maintenance of 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.

*“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year.
Subject to change. Check the current class schedule.
HORT 94  HORTICULTURE WORKSITE LEARNING - 1-4 Units (F/S)
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

HORT 97  SPECIAL TOPICS IN ENVIRONMENTAL HORTICULTURE - .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in environmental horticulture. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

HORT 98  SPECIAL TOPICS IN ENVIRONMENTAL HORTICULTURE - LAB SKILLS - .5-2 Units (CR/NC Option) (I)
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics in a lab setting dealing with changing knowledge in environmental horticulture. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

HORT 120  SELECTED TOPICS IN ORNAMENTAL HORTICULTURE: PRUNING (formerly HORT 128E and AGRI 128E) - .5 Unit (CR/NC Option) (I)
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.

HORT 121  SELECTED TOPICS IN ORNAMENTAL HORTICULTURE: VITICULTURE (formerly HORT 128O and AGRI 128O) - .5 Unit (CR/NC Option) (I)
Class Hours: 9 lecture total
Course will survey the selection, propagation, training and pruning of grapevine varieties.

HORT 122  SELECTED TOPICS IN ORNAMENTAL HORTICULTURE: PLANT PROPAGATION - .5 Unit (formerly HORT 128R and AGRI 128R) (CR/NC Option) (I)
Class Hours: 9 lecture total
Course will cover propagation by seed, cuttings, layering, grafting and budding. Rootstock selection will also be covered.

HORT 125  MICRO-IRRIGATION AND LOW WATER USE LANDSCAPING (formerly AGRI 125) -1 Unit (CR/NC Option) (I)
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.

HORT 130  INTRODUCTION TO NATIVE PLANTS (formerly AGRI 130) - 1 Unit (CR/NC Option) (I)
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.

HORT 133  INTRODUCTION TO RESIDENTIAL LANDSCAPE DESIGN (formerly AGRI 133) - 1 Unit (CR/NC Option) (I)
Class Hours: 18 lecture total
Course designed for non-horticulture majors and includes use of plant materials, texture, form, color, and scale. The selection, arrangement, and placement of hardscape and softscape materials will be emphasized.

HORT 137  ORCHARD MANAGEMENT PRACTICES (formerly AGRI 137) - 1 Unit (CR/NC Option) (I)
Note: There will be one four-hour lab on Saturday
Class Hours: 16 lecture/4 lab total
A study of the practices of producing fruits, nuts, and grapes. Varieties, areas, propagation, pollination, planting, pruning, disease and insect control will be discussed.
HOSPITALITY (HOSP)

HOSP 10  INTRODUCTION TO THE HOSPITALITY INDUSTRY - 3 Units (CR/NC Option) (F)
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 learning format.

HOSP 20  HOSPITALITY OPERATIONS MANAGEMENT - 3 Units (CR/NC Option) (I)
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 learning format.

HOSP 30  FOOD, BEVERAGE AND LABOR COST CONTROLS - 2 Units (CR/NC Option) (I)
Class Hours: 36 lecture total
Covers the principles involved in an effective and food beverage control system, including standards determination; variable, semi-variable and fixed cost; the operating budget, cost-volume-profit analysis, income and cost control menu pricing, labor cost control, and computer applications.

HOSP 35  COMPUTER APPLICATIONS IN THE HOSPITALITY INDUSTRY - 3 Units (CR/NC Option) (I)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Provides an overview of the information needs of lodging properties and food service establishments; addresses essential aspects of computer systems, such as hardware, software, and generic applications; focuses on computer-based property management systems for both front office and back office functions; and focuses on computer-based restaurant management systems for both service-oriented and management-oriented functions. This course may be offered in a distance learning format.

HOSP 40  HUMAN RESOURCE MANAGEMENT IN THE HOSPITALITY INDUSTRY - 3 Units (CR/NC Option) (S)
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 learning format.

HOSP 45  LEGAL ASPECTS OF THE HOSPITALITY INDUSTRY – 2 Units (F)
Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 108)
Legal Aspects of the Hospitality Industry 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 learning format.

HOSP 50  HOSPITALITY MARKETING, SALES AND ADVERTISING - 3 Units (CR/NC Option) (F)
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 learning format.

*“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year.
Subject to change. Check the current class schedule.
HOSP 60  HOSPITALITY AND FINANCIAL MANAGEMENT - 3 Units (CR/NC Option) (S)
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 learning format.

HOSP 65  HOSPITALITY SUPERVISION – 3 Units (CR/NC Option) (F)
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
learning format.

HOSP 94  HOSPITALITY WORKSITE LEARNING – 1-4 Units
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and
maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no
other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain
enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other
class (not to exceed 3 units)
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. This course may be
repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are
enhanced by supervised repetition and practice.

HOSP 97  SPECIAL TOPICS IN HOSPITALITY - .5-2 Units (CR/NC Option) (I)
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 topic will be addressed each time the class is taught and will be listed in the schedule of classes. Since
subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

HOSP 98  SPECIAL LAB TOPICS IN HOSPITALITY - .5-2 Units (CR/NC Option) (I)
Class Hours:  27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing
topics/knowledge in hospitality. A different topic will be addressed each time the class is taught and will be listed in the
schedule of classes. Since subject matter varies each time the course is taught, this course is repeatable three times for
a total of four enrollments.

HUMAN SERVICES  (HUSV)

HUSV 94  HUMAN SERVICES WORKSITE LEARNING - 1-4 Units
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and
maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no
other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain
enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other
class (not to exceed 3 units)
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. This course may be
repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are
enhanced by supervised repetition and practice.

HUSV 130  PRINCIPLES AND PRACTICES OF RESIDENTIAL CARE COUNSELORS - 3 Units (I)
Class Hours:  54 lecture total
A study of the principles and practices of child care. Research theories identifying developmental planning,
developmental needs, separation, cottage life, discipline, group process and the job. Concepts will be identified with
practical applications and implications for use in the child care setting.

HUSV 131  CRISIS MANAGEMENT – 3 Units (I)
Class Hours:  54 lecture total
A study of interventions and techniques utilized to provide positive and effective behavior management in residential and
acute care setting.
HUSV 132  INTRODUCTION TO MENTAL DISORDERS - 3 Units  (I)
Class Hours:  54 lecture total
A course of study to develop a working knowledge of mental disorders, particularly as described by Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition.

HUSV 133  RESIDENTIAL CARE REGULATIONS - 3 Units  (I)
Class Hours:  54 lecture total
An in depth view and working knowledge of licensing of Community Care Facilities. The counselor's role as upholder of regulations as defined in Title 22, Division 6, Community Care Act.

HUSV 134  RESIDENTIAL CARE PRACTICUM SEMINAR - 2 Units  (I)
Class Hours:  36 lecture total
Explore the actual working experiences of counselors working with individuals in residential care. Students will be assisted in converting classroom experience and knowledge into usable, practical skills for the work place.

HUSV 135  COUNSELING & COMMUNICATION IN RESIDENTIAL CARE - 3 Units  (I)
Note: This course will not train someone to do counseling
Class Hours:  54 lecture total
Designed for persons working or wanting to work in residential care facilities. It will provide an overview of basic communication and counseling skills and theories practiced in residential care facilities. Concepts will be identified and practical applications used to help the student develop an understanding of counseling and communication techniques.

HUSV 139  CHILD ABUSE PREVENTION - 2 Units  (I)
Class Hours:  36 lecture total
Designed for persons who work with children placed in care. It is particularly applicable for residential care workers (counselors) who are responsible for the safety and protection of children on a day-to-day basis. The course work will emphasize the “how to” rather than the “why.” It will concentrate on abuse detection, reporting, prevention, communication, and crisis management.

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  (F/S)
Class Hours:  54 lecture total
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.

HUM 4  HUMANITIES THROUGH THE FILM - 3 Units  (CR/NC Option)  (F/S)
Class Hours:  54 lecture total
An examination of the motion picture as an art form. Films from the silent era through contemporary works will be examined in order to analyze and appreciate them from philosophical, historical, literary, aesthetic and cultural perspectives.

HUM 70  EXPLORING CONTEMPORARY TELEVISION - 3 Units  (CR/NC Option)  (F/S)
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Class Hours:  54 lecture total
This course is 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.

HUM 304  ADVENTURES IN THE PERFORMING ARTS - 0 Units  (I)
Class Hours:  3-54 lecture total
Informal exploration of personalities and works in symphonic and chamber music, opera, modern drama, the American musical, and films, designed to promote increased personal enjoyment of these forms of artistic expression.

INDEPENDENT STUDY  (IS)

IS 99/199  INDEPENDENT STUDY – .5-2 Units
Class Hours:  27 hours for each .5 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 four independent study units.
### INDUSTRIAL TECHNOLOGY (INDE)

**INDE 1**  CAREER PLANNING FOR INDUSTRIAL TECHNOLOGY - 1 Unit (F/S)
- **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 (F/S)
- **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.

### APPRENTICESHIP TRAINING

These classes are for apprentices as well as any person interested in any of the below listed trade areas as a career, and is supervised by the Department of Apprenticeship Standards, State of California. This course is not intended for the student who is interested in any of the below listed trade areas as an avocation. The complete course is ten semesters in duration. A student must consult with the College Apprenticeship Coordinator prior to enrolling.

**INDE 161**  ELECTRICITY - 2 Units (CR/NC Option) (F/S)
- **Class Hours:** 18 lecture/54 lab total
  - The course is for electrical apprentices as well as any person interested in the electrical trades. The course is supervised by the Department of Apprenticeship Standards, State of California, and is not intended for the student who is interested in the electrical trade as an avocation. Course contains related technical instruction, supplementary to the apprentice's on-the-job training, beginning with knowledge of the trade, safety, related mathematics and basic processes and progressing through ten semesters (INDE 162, INDE 163) of related instruction. A student must consult with the College Apprenticeship Coordinator prior to enrolling.
  - **Note:** This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.

**INDE 162**  ELECTRICITY - 2 Units (CR/NC Option) (F/S)
- **Prerequisite:** A grade of C or higher in four semesters of INDE 161
- **Class Hours:** 18 lecture/54 lab total
  - INDE 162 is a continuation of the material taught in INDE 161. The course is for electrical apprentices as well as any person interested in the electrical trades. The course is supervised by the Department of Apprenticeship Standards, State of California, and is not intended for the student who is interested in the electrical trade as an avocation. A student must consult with the College Apprenticeship Coordinator prior to enrolling.
  - **Note:** This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.

**INDE 163**  ELECTRICITY - 2 Units (CR/NC Option) (F/S)
- **Prerequisite:** A grade of C or higher in four semesters of INDE 162
- **Class Hours:** 18 lecture/54 lab total
  - INDE 163 is a continuation of the material taught in INDE 162. The course is for electrical apprentices as well as any person interested in the electrical trades. The course is supervised by the Department of Apprenticeship Standards, State of California, and is not intended for the student who is interested in the electrical trade as an avocation. A student must consult with the College Apprenticeship Coordinator prior to enrolling.
  - **Note:** This course may be repeated one time for a total of two enrollments since course content varies and skills are enhanced by supervised repetition and practice.

### INTERDISCIPLINARY STUDIES - See NSCI

### 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 (CR/NC Option) (CAN# JAPN 2) (CAN# JAPN SEQ A) (F/S)
- **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 (CR/NC Option) (CAN # JAPN 4) (CAN# JAPN SEQ A) (S)
- **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.
### JOURNALISM (JOUR)

**JOUR 21** INTRODUCTION TO MASS COMMUNICATIONS - 3 Units (CR/NC Option) (CAN # JOUR 4) (S)
- **Class Hours:** 54 lecture total
- **Advisory:** A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, and ability to type 25 wpm
- **Prerequisite:** A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, and ability to type 25 wpm
- **Class Hours:** 54 lecture total
- **Note:** 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 (formerly JOUR 24A/24BD) - 2 Units (F/S/I)
- **Advisory:** A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, and ability to type 25 wpm
- **Class Hours:** 18 lecture/54 lab total
- **Note:** Students must furnish own camera, film and paper.
- **Prerequisite:** A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, and ability to type 25 wpm
- **Class Hours:** 54 lecture total
- **Note:** This course may be repeated three times for a total of four enrollments, since course content varies and skills are enhanced by repetition and practice.

**JOUR 27** NEWSWRITING AND REPORTING - 3 Units (CR/NC Option) (CAN # JOUR 2 ) (F/S)
- **Advisory:** A grade of C or higher in ENGL 190 or English Placement Level 6, and ability to type 25 wpm
- **Class Hours:** 54 lecture total
- **Note:** During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
- **Class Hours:** 75 hours paid or 60 hours non-paid per unit
- **Prerequisite:** A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, and ability to type 25 wpm
- **Class Hours:** 54 lecture total
- **Note:** Students must furnish own camera, film and paper.
- **Class Hours:** 54 lecture total
- **Note:** Theory and practice of photography for the print media, including college publications and publicity. Picture-taking and and digital imaging procedures.

### LEGAL ASSISTANT (LEGL)

**LEGL 94** LEGAL ASSISTANT WORKSITE LEARNING - 1-4 Units (F/S)
- **Limitation on Enrollment:** To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.
- **Note:** During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
- **Class Hours:** 75 hours paid or 60 hours non-paid per unit
- **Note:** Students may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

*F" and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year.
Subject to change. Check the current class schedule.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units (Options)</th>
<th>Class Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEGL 97</td>
<td>SPECIAL TOPICS IN LEGAL ASSISTANT</td>
<td>.5-2 Units (CR/NC Option)</td>
<td>9-36 lecture total</td>
<td>This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in legal assistant. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. <strong>Note:</strong> Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.</td>
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<tr>
<td>LEGL 98</td>
<td>SPECIAL LAB TOPICS IN LEGAL ASSISTANT</td>
<td>.5-2 Units (CR/NC Option)</td>
<td>27-108 lab total</td>
<td>This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in legal assistant. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. <strong>Note:</strong> Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.</td>
</tr>
<tr>
<td>LEGL 139</td>
<td>INTRODUCTION TO PARALEGALISM (formerly BUSI 140)</td>
<td>3 Units (F)</td>
<td>54 lecture total</td>
<td>This is an introductory course to the Legal Assistant program designed to familiarize the student with the basic principles and the nomenclature of various facets of the law. It includes an overview of legal terminology and classifications, legal ethics, sources of law, family law, probate, civil procedure and litigation, including the structure of the court system, torts, contracts, criminal law and procedure, and property and estate law. <strong>Required for Legal Assistant majors.</strong></td>
</tr>
<tr>
<td>LEGL 140</td>
<td>LEGAL RESEARCH AND WRITING I (formerly BUSI 141A)</td>
<td>3 Units (F)</td>
<td>54 lecture total</td>
<td>Designed to familiarize the student with the basic tools of legal research in both Federal and California law, with emphasis on California materials. The student will learn how to locate and update relevant authorities, interpret and apply that authority to fact patterns, and put it into a usable form. The student will be introduced to drafting basic legal documents based upon the research conducted. <strong>Required for Legal Assistant majors.</strong></td>
</tr>
<tr>
<td>LEGL 141</td>
<td>LEGAL RESEARCH AND WRITING II (formerly BUSI 141B)</td>
<td>3 Units (S)</td>
<td>54 lecture total</td>
<td>Designed to expand both legal research and legal writing skills. Students prepare in-depth legal documents based on the student's research with emphasis on legal writing. <strong>Required for Legal Assistant majors.</strong></td>
</tr>
<tr>
<td>LEGL 142</td>
<td>DISCOVERY (formerly BUSI 142)</td>
<td>3 Units (S)</td>
<td>54 lecture total</td>
<td>A complete study of all aspects of civil discovery procedures used in preparing a case for trial. Emphasis will be placed upon document production, depositions, interrogatories, expert witnesses, requests for admissions and inspection demands. <strong>Required for Legal Assistant majors.</strong></td>
</tr>
<tr>
<td>LEGL 143</td>
<td>REAL ESTATE LAW (formerly BUSI 143)</td>
<td>3 Units (F)</td>
<td>54 lecture total</td>
<td>This course analyzes form and procedures of real property and studies the more common types of real estate transactions and conveyances, such as secured transactions, deeds, contracts and leases. <strong>Required for Legal Assistant majors.</strong></td>
</tr>
<tr>
<td>LEGL 144</td>
<td>CIVIL PROCEDURES AND LITIGATION (formerly BUSI 144)</td>
<td>3 Units (F)</td>
<td>54 lecture total</td>
<td>An introduction to the legal system with emphasis given to understanding the practical aspects of litigation, and the proper procedures required by statutes and rules of court. The student will become familiar with all phases of court procedure, including venue, jurisdiction, pleadings, motions, appeals, and the proper means and forms by which matters are submitted to the court system. <strong>Required for Legal Assistant majors.</strong></td>
</tr>
<tr>
<td>LEGL 145</td>
<td>TORTS (formerly BUSI 145)</td>
<td>3 Units (F)</td>
<td>54 lecture total</td>
<td>Provides students with the study of substantive law of torts with emphasis on California law. <strong>Required for Legal Assistant majors.</strong></td>
</tr>
<tr>
<td>LEGL 146</td>
<td>BANKRUPTCY PRACTICES (formerly BUSI 146)</td>
<td>2 Units (I)</td>
<td>36 lecture total</td>
<td>A comprehensive study of bankruptcy regulations, procedures, pleadings and forms. <strong>Recommended as an elective in the Legal Assistant program.</strong></td>
</tr>
<tr>
<td>LEGL 147</td>
<td>CONTRACT, EMPLOYMENT AND AGENCY (formerly BUSI 147)</td>
<td>2 Units (F)</td>
<td>36 lecture total</td>
<td>A study of the law related to contract and agency and the practical aspects of drafting contracts and agency employment agreements. <strong>Required for Legal Assistant majors.</strong></td>
</tr>
<tr>
<td>LEGL 148</td>
<td>FAMILY LAW (formerly BUSI 148)</td>
<td>3 Units (S)</td>
<td>54 lecture total</td>
<td>A study of the law and procedures in California related to marriage, domestic violence, legal separation, spousal and child support, community property and dissolution of the marriage. Emphasis is on preparation of documents for attorney review. <strong>Required for Legal Assistant majors.</strong></td>
</tr>
</tbody>
</table>
LEGL 149   COMMERCIAL LAW (formerly BUSI 149) - 2 Units  (S)
Prerequisite: A grade of C or higher in LEGL 147
Class Hours:  36 lecture total
Analyzes forms and procedures of commercial practices with particular emphasis on common sales and lease transactions, secured sales transactions, creditor’s rights, and insurance. Required for Legal Assistant majors.

LEGL 150  BUSINESS ORGANIZATIONS (formerly BUSI 170) - 2 Units  (I)
Class Hours:  36 lecture total
Substantive and procedural law of basic business organizations, including sole proprietorships, partnerships, limited partnerships and corporations, with an emphasis on California law. Recommended as an elective in the Legal Assistant program.

LEGL 151  ESTATE PLANNING (formerly BUSI 171) - 3 Units  (I)
Prerequisite: A grade of C or higher in LEGL 144
Class Hours:  54 lecture total
This course will familiarize the student with the terminology of estate planning, explore the various devices for transfer of estates, including wills, trusts, intestacy, gifts, insurance and annuities, and joint tenancy, examine the impact of taxes and administrative costs on planning, and review adjuncts of the planning process, such as durable powers of attorney, directives to physician and anatomical gifts. Recommended as an elective in the Legal Assistant program.

LEGL 152  COLLECTIONS AND JUDGMENTS (formerly BUSI 172) - 2 Units  (I)
Prerequisite: A grade of C or higher in LEGL 144
Class Hours:  36 lecture total
Designed to acquaint the student with the procedures available for obtaining collection on an existing money judgment. Topics will include issuance of the Writ of Execution, Levy, Wage Garnishment and Claims of Exemption. In addition, discussion of pre-judgment collection remedies shall be presented including State and Federal Fair Debt Collection Practices Act.

LEGL 153   PROBATE (formerly BUSI 173) - 3 Units  (S)
Prerequisite: A grade of C or higher in LEGL 144
Class Hours:  54 lecture total
The course will explore various methods of administering decedents’ estates, the jurisdiction of the probate court, the process of estate administration and distribution, estate litigation and will contests. Appropriate use of the California Probate Code and Probate forms is emphasized. The course will provide an overview of conservatorships and guardianships. Required for Legal Assistant majors.

LEGL 155   TECHNIQUES OF INTERVIEW AND INVESTIGATION (formerly BUSI 175) - 2 Units  (I)
Class Hours:  36 lecture total
A study of basic communication skills and their application to developing efficient and thorough interview techniques for use in a law office setting. Development of checklists and the orderly assembling and collection of information necessary to assist in the evaluation of the case and issues. Recognition of the ethical considerations involved in the gathering of information and interviewing situations. Recommended as an elective in the Legal Assistant program.

LEGL 156   CRIMINAL LAW AND PROCEDURE (formerly BUSI 177) - 3 Units  (I)
Class Hours:  54 lecture total
This course addresses various criminal offenses; the criminal court system; criminal investigation and prosecution; discovery and investigation; criminal pretrial motions, trial preparation; trial procedures; post-trial motions and relief. Recommended as an elective in the Legal Assistant program.

LEGL 158  AMERICAN INDIAN LAW - 2 Units  (I)
Class Hours:  36 lecture total
The class is designed to familiarize the student with the nature and scope of American Indian Law. The student will be introduced to the structures and laws that govern Indian tribal governments on Indian tribal land. Students will be introduced to Federal Indian Law including the Indian Civil Rights Act and the Indian Child Welfare Act. Tribal law topics covered include tribal constitutions, the tribal legislative process, the role of tribal traditions and customs, tribal courts, sources of tribal law, limitations on tribal law, and the application of tribal law in tribal courts.

MARKETING  (MKTG)
See Also: ACCT, BUAD, MIS, OAS, and REAL

MKTG 70  SALES (formerly BUSI 70) - 3 Units  (CR/NC Option)  (S)
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.

MKTG 72  ADVERTISING (formerly BUSI 72) - 3 Units  (CR/NC Option)  (I)
Class Hours:  54 lecture total
This course is designed to help the student develop proficiency in handling everyday advertising problems. Covers national and local retailing advertising with major emphasis on local advertising. Topics include budgeting, media selection, layout, copy writing, target identification, setting objective, planning, and desktop publishing availability.

*“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year.
Subject to change. Check the current class schedule.
MKTG 74  PRINCIPLES OF MARKETING (formerly BUSI 74) - 3 Units (CR/NC Option) (S)
Class Hours: 54 lecture total
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. This course may be offered in a distance learning format.

MKTG 76  EVENT MARKETING - 3 Units (I)
Class Hours: 54 lecture total
Event Marketing is designed to provide students with the learning opportunity to plan and implement an actual marketing strategy for a local business. The strategy is planned, designed and directed by students, with the assistance of a marketing instructor, an established marketing consultant and a local business manager. Students will be required to research the market for the local business manager, develop a marketing promotional event, implement the event with a budget, and finally evaluate the results of the marketing strategy. This course may also be considered as an internship.

MKTG 94  MARKETING WORKSITE LEARNING - 1-4 Units
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.
Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

MKTG 97  SPECIAL TOPICS IN MARKETING - .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in marketing. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes.
Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

MKTG 98  SPECIAL LAB TOPICS IN MARKETING - .5-2 Units (CR/NC Option) (I)
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in marketing. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes.
Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

MKTG 176  RETAIL MANAGEMENT (formerly BUSI 176) - 3 Units (CR/NC Option) (I)
Class Hours: 54 lecture total
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 business 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 learning format.

MATH 2  PRECALCULUS – 5 Units (CAN # MATH 16) (F/S)
Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 90 lecture total
A course using graphing calculators to prepare the student for MATH 3A (Calculus). The content includes linear, polynomial, rational, logarithmic, exponential and trigonometric functions, conic sections, matrices, parametric equations, and their applications. The equivalent of this course in content and objectives may also be offered on the Internet.

MATH 3A  CALCULUS 3A - 4 Units (CAN# MATH 18) (MATH SEQ B) (MATH SEQ C) (F/S)
Prerequisite: A grade of C or higher in MATH 2 or Math Placement Level 5 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total
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 learning format.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3B</td>
<td>CALCULUS 3B - 4 Units (CAN# MATH 20) (MATH SEQ B) (MATH SEQ C) (F/S)</td>
<td>4</td>
<td>Prerequisite: A grade of C or higher in MATH 3A or Math Placement Level 6 or higher. Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher. Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216). This course continues and extends the discussion of differentiations and integration begun in MATH 3A. Students will be introduced to properties of finite and infinite series. This course may be offered in a distance learning format.</td>
</tr>
<tr>
<td>MATH 4A</td>
<td>CALCULUS 4A - 4 Units (CAN# MATH 22) (MATH SEQ C) (F)</td>
<td>4</td>
<td>Prerequisite: A grade of C or higher in MATH 3B, or Math Placement Level 7 or higher. Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher. Class Hours: 72 lecture total. This course covers vectors in two and three dimensions, partial differentiation, multiple integrals, line integrals, divergence, gradient, curl, Stoke's and Green's Theorems.</td>
</tr>
<tr>
<td>MATH 4B</td>
<td>CALCULUS 4B - 4 Units (CAN# MATH 24) (S)</td>
<td>4</td>
<td>Prerequisite: A grade of C or higher in MATH 3B, or Math Placement Level 7. Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher. Class Hours: 72 lecture total. This course covers vectors in two and three dimensions, partial differentiation, multiple integrals, line integrals, divergence, gradient, curl, Stoke's and Green's Theorems.</td>
</tr>
<tr>
<td>MATH 8</td>
<td>FINITE MATHEMATICS - 3 Units (CAN # MATH 12) (F/S)</td>
<td>3</td>
<td>Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher. Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher. Class Hours: 54 lecture total. This course is intended to provide (along with MATH 9) the mathematical skills needed for entry into upper division Business, Social, and Behavioral Science courses. The course will cover: sets, matrices, and system of equations and inequalities; linear programming; counting techniques and introduction to probability; and mathematics of finance.</td>
</tr>
<tr>
<td>MATH 9</td>
<td>SURVEY OF CALCULUS - 3 Units (CAN # MATH 30) (F/S)</td>
<td>3</td>
<td>Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher. Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher. Class Hours: 54 lecture total. A 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.</td>
</tr>
<tr>
<td>MATH 10</td>
<td>PLANE TRIGONOMETRY - 3 Units (CAN# MATH 8) (S)</td>
<td>3</td>
<td>Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher. Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher. Class Hours: 54 lecture total. A basic course in trigonometry. Topics covered include angles, units of measurement, trigonometric functions, solutions of right and oblique triangles, identities, graphs, vectors and polar coordinates. Numerical methods and problem solving using a graphic calculator are emphasized.</td>
</tr>
<tr>
<td>MATH 11</td>
<td>PATTERNS OF MATHEMATICAL THOUGHT - 3 Units (F)</td>
<td>3</td>
<td>Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher. Class Hours: 54 lecture total. A one-semester survey course emphasizing mathematical reasoning. Various applications of mathematics are covered with topics selected from: Geometry, Statistics, Management Science, Number Theory, Social Science, and Computer Science. The course is designed to give students an understanding of some of the vocabulary and methods of mathematics with a focus on ideas.</td>
</tr>
<tr>
<td>MATH 13</td>
<td>COLLEGE ALGEBRA (formerly MATH 1) - 3 Units (F/S)</td>
<td>3</td>
<td>Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher. Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher. Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162). This course introduces functions and function algebra. The main focus is on linear, polynomial, rational, logarithmic and exponential functions. Students will learn algebraic techniques, modeling techniques and technology-based techniques for solving equations involving these functions and for investigating the graphs of these functions. This course may be offered in a distance learning format.</td>
</tr>
<tr>
<td>MATH 14</td>
<td>INTRODUCTION TO STATISTICS - 3 Units (F/S) (CAN# STAT 2)</td>
<td>3</td>
<td>Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher. Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher. Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162). An introductory course in statistics designed to show the role of modern statistical methods in the process of decision making. Concepts are introduced by example rather than by rigorous mathematical theory. The following topics will be covered: measures of central tendency and dispersion, regression and correlation, probability, sampling distributions including the normal, t, and chi-square, statistical inference using confidence intervals and hypotheses testing. This course may be offered in a distance learning format.</td>
</tr>
</tbody>
</table>

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year. Subject to change. Check the current class schedule.
MATH 41A  CONCEPTS OF ELEMENTARY MATHEMATICS - 3 Units  (CAN MATH # 4) (F/S)
Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Note: This course is valuable for students intending to become elementary school teachers.
Class Hours: 54 lecture total
Survey of the elements of mathematics usually taught in the elementary schools. Emphasis is on development of the real number system by intuitive and semi-rigorous methods, discussion of sets, axiomatics, systems of numeration, arithmetic processes, inductive and deductive reasoning and problem solving.

MATH 41B  CONCEPTS OF ELEMENTARY MATHEMATICS - 3 Units  (F/S)
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher (MATH 41A is not a prerequisite for MATH 41B)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Note: This course is valuable for students intending to become elementary school teachers.
Class Hours: 54 lecture total
Survey of the elements of mathematics usually taught in the elementary grades from an advanced standpoint. Emphasis is on geometry, probability and statistics.

MATH 100  TECHNICAL APPLICATIONS OF MATHEMATICS - 3 Units  (F/S)
Prerequisite: A grade of C or higher in MATH 240, or Math Placement Level 2 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher.
Class Hours: 54 lecture total
This course blends mathematical topics with practical applications. Emphasis will be placed on the use of mathematics in solving problems, drawn from various vocational fields. Topics in arithmetic, algebra, geometry, and right-triangle trigonometry will be covered. MATH 100 provides a practical, hands-on means of satisfying the A.S. degree’s Math Competency Requirement.

MATH 101  BASIC ALGEBRA - 3 Units  (F/S)
Prerequisite: A grade of C or higher in MATH 240, or Math Placement Level 2 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
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. This course may be offered in a distance learning format.

MATH 102  INTERMEDIATE ALGEBRA - 4 Units  (F/S)
Prerequisite: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
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 learning format.

MATH 110  ESSENTIAL MATH (FOR THE ASSOCIATE DEGREE) – 3 Units  (F/S)
Prerequisite: A grade of C or higher in MATH 240 or Math Placement Level 2 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher.
Class Hours: 54 lecture total (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 learning format.

MATH 150  OVERCOMING MATH ANXIETY (formerly GS 100) – 1 Unit  (CR/NC Option) (F/S)
Note: Students do not necessarily need to be concurrently enrolled in a math class.
Class Hours: 18 lecture total
Many specific techniques for managing anxiety and overcoming psychological barriers to math. Reversing negative math “self-talk”. Creating positive attitudes and building self-confidence in math. Focus on learning styles and study skills, specifically for math. Techniques for overcoming test anxiety. Analysis of the importance of mathematics in all aspects of life.

MATH 197  SPECIAL TOPICS IN MATHEMATICS - .5-2 Units  (CR/NC Option)  (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with mathematics. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for mathematics majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.

MATH 220  BASIC MATHEMATICS - 3 Units  (F/S)
Advisory: A grade of C or higher in ENGL 260 or English Placement Level 3 or higher
Class Hours: 54 lecture total
A course covering the basic skills of addition, subtraction, multiplication and division of whole numbers, fractions, and decimals, with word problem applications. Subjects also taught include prime numbers, order of operations, ratios, and proportions.
MATH 240  PRE-ALGEBRA - 3 Units  (F/S)
Prerequisite:  A grade of C or higher in MATH 220, or Math Placement Level 1 or higher
Advisory:  A grade of C or higher in ENGL 260 or English Placement Level 3 or higher
Class Hours:  54 lecture total  (when offered in the Distance Education format, hours will total 162)
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, 110, 100 and/or BUAD 106.  This course may be offered in a distance learning format.

MATH 382  MATHEMATICS WORKSHOP - 0 Units  (F/S)
Class Hours:  TBA
A program to help students overcome mathematics learning problems and achieve mathematical success.

MICROBIOLOGY  (MICR)

MICR 1  MICROBIOLOGY - 5 Units (CAN # BIOL 14) (F/S)
Prerequisite:  A grade of C or higher in one of the following courses: CHEM 1A, 2A, or CHEM 2B
Class Hours:  54 lecture/108 lab total
This course is an introduction to microorganisms, including bacteria, viruses, protozoans, fungi, and helminths. Topics covered include the general properties, characteristics, and classification of microbes, identification and control, genetics and biotechnology, physiology, metabolism, and ecology. Also discussed are immunity and the medical impact of microbial diseases.

MUSIC  (MUS)
All music theory and literature courses: ENGL 190 eligibility.  All other music classes have specific musical performance ability requirements which are listed in each course description.

MUS 1  MUSIC FUNDAMENTALS - 3 Units (CR/NC Option)  (F/S)
Advisory:  Concurrent enrollment in MUS 22
Class Hours:  54 lecture total
A course in music theory for the general student. Class includes pitch notation, melody, rhythm and meter, scales and modes, intervals, keys and key signatures, triads, chords, sight singing and melodic dictation. Course is designed for Elementary Education majors and Pre-Music Core Program. Some math, especially fractions, is necessary. A computerized tutorial is included in the text, although not required. Piano skills are helpful in maximizing learning in this course.

MUS 2  DIATONIC HARMONY AND MUSICIANSHIP - 5 Units  (CR/NC Option)  (CAN # MUS 2)  (CAN# MUS SEQ A)  (F)
Prerequisite:  A grade of C or higher in MUS 1
Class Hours:  72 lecture/54 lab
A study of scales and modes, key signatures and intervals. Anatomy of harmony and melody. Four-part harmonic writing, basic progression and integration of both with ear training and sight-singing. Analysis of music will be concurrent with materials studied. Course is designed for the Music Core Program and is the first course of the four semester music theory sequence required to satisfy the Music Core Program and lower division music transfer. This course utilizes a lab period to build and apply keyboard skills. Course may be challenged and is transferable.

MUS 3  DIATONIC HARMONY AND MUSICIANSHIP - 5 Units  (CR/NC Option)  (CAN# MUS 4)  (CAN# MUS SEQ A)  (S)
Prerequisite:  A grade of C or higher in MUS 2
Class Hours:  72 lecture/54 lab
This course is designed for the Music Core Program. It is the second course of the four-semester Music Theory Sequence required to satisfy the Music Core Program and lower division music transfer, may be challenged and is transferable. Course content includes idiomatic work from selected historical periods with a critical approach to stylistic analysis. All diatonic chords through the introduction of the V7, the first truly chromatic chord will be studied. The syntax of all diatonic chords and their hierarchy in the harmonic language will be learned, along with all inversions. The course work utilizes a lab period to build and apply keyboard skills.

MUS 4  CHROMATIC HARMONY - 5 Units  (CR/NC Option)  (F)
Prerequisite:  A grade of C or higher in MUS 3
Class Hours:  72 lecture/54 lab
This is the third course of the four semester music theory sequence required to satisfy the Music Core Program and lower division music transfer, may be challenged and is transferable. It must be taken for a grade by music majors. Course content includes modulation, pivot chords, chromatic chords containing tritones, secondary dominants, all sevenths, including minor, major, half diminished, fully diminished, 9th chords, major and minor 11th and 13th chords, with and without tritones. Chromatic alterations as used during the 18th and 19th centuries. Continuation of 2 & 3 art forms, Neapolitan 6th Chords, Augmented 6th Chords, altered dominants and lead ins to the concept of Sonata-Allegro form. The course work utilizes a lab period to build and apply keyboard skills.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.
MUS 5  TWENTIETH CENTURY HARMONY - 5 Units (CR/NC Option) (S)
Prerequisite: A grade of C or higher in MUS 4
Class Hours: 72 lecture/54 lab
Analytical techniques: development of critical judgments about 20th Century styles. A study of the composition techniques and harmonic practices of the 20th century. This includes the whole-tone scale, church modes, pentatonic scale, 7th, 9th, 11th, 13th chords, chords of omission and addition, non-tertian chords, pan-diatonicism, chord cluster, meter changing, 12-tone techniques and other modern developments. The course may culminate in the writing of a composition, probably theme and variations. This course utilizes a lab period to build and apply keyboard skills. This is the fourth semester music theory sequence required to satisfy the Music Core program and lower division music transfer.

MUS 7  BEGINNING ARRANGING & SONGWRITING - 3 Units  (S)
Prerequisite: A grade of C or higher in MUS 1
Class Hours: 54 lecture total
A course that covers the basic elements of arranging in all styles of popular music, but particularly in jazz, while exploring techniques that will assist the student in songwriting. The course gives the student the opportunity to become familiar with chord symbols, open and closed-block voicing of triads through thirteenth chords, instrumental transposition, rhythmic and articulation considerations, melodic embellishments, and the jazz and rock rhythm sections.

MUS 10  MUSIC APPRECIATION - 3 Units  (CR/NC Option)  (CAN # MUS 8)  (F/S)
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  (F/S)
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 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 12  INTRODUCTION TO COMPUTERS AND ELECTRONIC INSTRUMENTS IN MUSIC - 1.5 Units (I)
Prerequisite: A grade of C or higher in MUS 1
Class Hours: 18 lecture/36 lab total
This course is an entry-level class designed to introduce the student to the basic elements and fundamental use of computers and electronic instruments in music. Course enrollment is open to music majors and non-music majors. Topics will include: computer and electronic music terminology and usage, synthesizers, samplers, synthesis methods, Musical Instrument Digital Interface (MIDI), audio gear, MIDI sequencers, click track, quantizing, multi-track recording, and various computer software including notation, sequencing, composing and performance software. The course will involve lecture and computer music laboratory settings. This course is introductory level and is not designed for intermediate or advanced study.

MUS 20  BRASS (formerly MUS 20AB)- 1 Unit  (CR/NC Option)  (I)
Advisory: A grade of C or higher in MUS 1
Class Hours: 9 lecture/27 lab
A beginning course in the techniques of playing the trumpet, trombone, baritone, French horn, or tuba through the introduction of embouchure, breath, tone, pitch and timbre. Simple compositions, intervals, scales and articulation studies are used. Course recommended for Music Core Program. Note: this course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

MUS 21  GUITAR (formerly MUS 21A/21B) - 1 Unit  (F/S)
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. Course designed for Music Core Program. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 22  BEGINNING PIANO (formerly MUS 22A) - 1 Unit  (CR/NC Option)  (F/S)
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). Designed for Elementary Education majors and Pre-Music Core Program.

MUS 23  INTERMEDIATE PIANO (formerly MUS 22BD) - 1 Unit  (CR/NC Option)  (F/S)
Prerequisite: A grade of C or higher in MUS 22
Class Hours: 9 lecture/27 lab
A developmental course in keyboard techniques (simple piano music, accompaniments, chords, scales, and exercises) and music fundamentals (notation, melody, harmony and rhythm). Course is designed for Elementary Education majors and Pre-Music Core Program. Note: This course may be repeated twice for a total of three enrollments since skills are enhanced by supervised repetition and practice.
MUS 24  PERCUSSION - 1 Unit  (I)
Class Hours: 9 lecture/27 lab
A beginning course on snare drum, which includes learning to play, count and write rhythm patterns in 4/4, 2/4, 3/4, and 6/8 time signatures through the study of the thirteen rudiments for the snare drum. The percussion family is studied by playing percussion ensemble compositions. Course is recommended for Music Core Program.

MUS 25  STRINGS (formerly MUS 25AB/25CD) - 1 Unit  (CR/NC Option)  (I)
Advisory: A grade of C or higher in MUS 1
Note: Instruments provided if available
Class Hours: 9 lecture/27 lab
A beginning course in violin, viola, violoncello and string bass organized to establish basic skills of tuning, pitch and tone production, both pizzicato and bowed, beginning in the first position until security in the frame of the hand and correct playing position is established. Elementary shifting first to third position on violins/violas. Normal and extended first position on the cello. Half and first position on string bass. Advanced positions and shifting on all instruments. Bowing techniques include on the string bowings, detache, linked, legato and mixed bowings when appropriate. Later study of off the string bowings, vibrato, special effects. The major goals of the course are to establish intermediate and advanced skills with sound pedagogy while playing representative string solo music, simple chamber music, duets, trios, quartets, and orchestra music with correct bowings and style. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 28  WOODWINDS (formerly MUS 28A) - 1 Unit  (I)
Class Hours: 9 lecture/27 lab
A beginning course in the techniques of playing the flute, oboe, clarinet, bassoon and saxophone through the introduction of embouchure, breath, tone, pitch and timbre. Simple compositions, intervals, scales and articulation studies are used. Course recommended for Music Core Program. Note: This course may be repeated once for a total of two enrollments since skills are enhanced by supervised repetition and practice.

MUS 29  BEGINNING VOICE (formerly MUS 27A) - 1 Unit  (F/S)
Class Hours: 9 lecture/27 lab
A beginning course in the vocal technique, repertoire, state 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 Core Program, Theatre Arts majors and Elementary Education majors.

MUS 30  INTERMEDIATE VOICE (formerly MUS 27B) - 1 Unit  (CR/NC Option)  (F/S)
Prerequisite: A grade of C or higher in MUS 29
Class Hours: 9 lecture/27 lab
An intermediate course in vocal technique and performance. Course utilizes a variety of vocal literature to teach tone quality, breath control, posture, lyric diction and interpretation. Class performances required. Course recommended for Music Core Program, Theatre Arts majors and Elementary Education majors.

MUS 31  CHAMBER CHOIR (formerly MUS 31AD) - 1 Unit  (I)
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.
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 (formerly MUS 33AD) - 1 Unit  (F/S)
Class Hours: 54 lab total
Note: Field trips and performances are required.
This course provides 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 (formerly MUS 35AD) - 1 Unit  (I)
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.
Note: Field trips and 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.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.
MUS 39  CHAMBER MUSIC (formerly MUS 39AD) - 1 Unit (I)
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 Community Band or MUS 25 Strings
Note: Field trips and performances are required.
Class Hours: 54 lab
timeless for a total of four enrollments since skills are enhanced by supervised repetition and practice.
MUS 40  CONCERT CHOIR (formerly MUS 40AD) - 1 Unit (I)
Note: Field trips and 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. 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 (CR/NC Option) (I)
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
Note: Field trips and performances are required (SSA)
Class Hours: 54 lab total
A performing choir that sings choral works for women's chorus (SSA) 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 COMMUNITY CHORALE (formerly MUS 42AD) - 1 Unit (F/S)
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.
Note: Field trips and 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 COMMUNITY SYMPHONY (formerly MUS 43AD) - 1 Unit (CR/NC Option) (F/S)
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 Community Band or MUS 25 Strings
Note: Field trips and performances are required
Class Hours: 54 lab total
A college/community symphony orchestra providing an opportunity for the students and community instrumentalists to perform standard and contemporary orchestral literature. Field trips and performances are required. All community 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 (CR/NC Option) (F/S)
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 Community Band
Note: Field trips and performances are required.
Class Hours: 27-54 lab total
A college and community based symphony orchestra for the training of young musicians. Provides an opportunity for them to perform standard and contemporary literature for younger musicians preparatory to participation in the Shasta College Community Orchestra (MUS 43). 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 45  WIND BAND (formerly MUS 45AD) - 1 Unit (I)
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 Community Band
Note: Field trips and performance are required.
Class Hours: 54 lab total
A course performing both standard and contemporary band literature. 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 46  SHASTA COLLEGE COMMUNITY SYMPHONIC BAND (formerly MUS 46AD) - 1 Unit  (F/S)

**Note:** Field trips and performance 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 COMMUNITY JAZZ ENSEMBLE (formerly MUS 47AD) - 1 Unit  (F/S)

**Limitation on Enrollment:** Admission to this class will 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 performance are required.

**Class Hours:** 54 lab total

This class offers experience in the study and performance of big-band jazz arrangements. 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 61  PERFORMANCE ANALYSIS (formerly MUS 61AD) - .5 Unit (CR/NC Option)  (F/S)

**Class Hours:** 27 lab

A course in the experience of listening, analyzing and criticizing classical music performances in class and community. Applied Music students, local musicians and professional musicians perform and lecture. Required for Pre-Music Program and Music Core Program. **Note:** This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

### MUS 98  SPECIAL MUSIC TOPICS (formerly MUS 98AD) .5-2 Units  (CR/NC Option)  (I)

**Class Hours:** 9-36 lecture total

This course is designed to give students an opportunity to study a variety of topics dealing with performance, musicology, changing knowledge and contemporary issues in the field of music. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Music majors; open to anyone with an interest in the topic. **Note:** Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

### MUS 120  VOCAL DEVELOPMENT - CLASSICAL – 1-2 Units (CR/NC Option)  (Summer/I)

**Limitation on Enrollment:** Admission to this class will be by audition to determine performance ability.

**Note:** Field trips and performances are required. Students are expected to progress in skill level to be able to master more advanced material.

**Class Hours:** 1 Unit=9 lecture/27 lab; 2 Units=18 lecture/54 lab

This class provides the student with vocal techniques and repertoire that are fundamental to achieving proficiency as a singer of classical art song repertoire at an advanced level. Emphasis is on solo performance, collaborative performance, and small ensemble performance of the solo repertoire in English, German, French and Italian. **Note:** Course may be repeated three times for a maximum of four enrollments.

### MUS 121  VOCAL DEVELOPMENT – OPERA/MUSICAL THEATRE – 1-2 Units (CR/NC Option)  (Summer/I)

**Limitation on Enrollment:** Admission to this class will be by audition to determine performance ability.

**Note:** Field trips and performances are required. Students are expected to progress in skill level to be able to master more advanced material.

**Class Hours:** 1 Unit=9 lecture/27 lab; 2 Units=18 lecture/54 lab

This class is for the vocal student who wishes to acquire and practice vocal techniques and repertoire of a professional nature, by providing operatic or theatrical experiences learning and performing small and large roles, ensembles, and necessary stagecraft. Emphasis is on classical opera repertoire of the various eras, sometimes performed in original languages when appropriate. Broadway musical repertoire includes scenes with movement. Requires active performance and movement on stage. **Note:** Course may be repeated three times for a maximum of four enrollments.

### MUS 301  ORCHESTRA FOR SENIORS - 0 Units  (F/S)

**Class Hours:** 9-54 lab total

A course designed to offer opportunities for older adults to participate in ensemble music with the Symphony Orchestra. Admission to the class will by audition to determine performance ability [Ed. Code Sect. 58106 (b)(3)].

### MUS 302  SYMPHONIC BAND FOR SENIORS - 0 Units  (F/S)

**Class Hours:** 54 lab total

A course designed to offer opportunities for adults to participate in ensemble music with the Symphonic Band. Note: Field trips and performances are required.

### MUS 303  MUSIC FOR SENIORS - 0 Units  (F/S)

**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.

*“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year. Subject to change. Check the current class schedule.*
NATURAL HISTORY (NHIS)

NHIS 15  NATURAL HISTORY - 3 Units (CR/NC Option) (F/S)
Class Hours: 54 lecture total
Designed to give the student a unified view of the natural history of Northern California and its relative place in the universe. The geology, freshwater and ocean environment, weather, lifezones, plant and animal species are emphasized.

NHIS 65  NATURAL HISTORY OF PATRICK'S POINT (formerly NHIS 65AB) - 1 Unit (CR/NC Only) (S)
Note: Students must provide their own camping gear and food. The college supplies and requires bus transportation for no additional cost.
Class Hours: 9 lecture/27 lab total - includes one orientation meeting plus one weekend
A three day, two night field trip to Patrick's Point State Park to familiarize students with the organisms and ecological interactions occurring in the various plant communities and intertidal zones. One pre-trip introductory lecture will be held. This course is repeatable one additional time since students will be able to reflect a higher level of understanding with increased exposure.

NHIS 105  NATURAL HISTORY OF THE SOUTHERN CASCADES (formerly GEOL 105) – 1 Unit (CR/NC Option) (I)
Note: Required overnight field trip.
Class Hours: 9 lecture/27 lab total
This course is an introductory, short-term field class in which the development of land forms and occupation of niches associated with a volcanic site will be covered. Types of volcanoes, life zones, specimen identification (rock, plant, and animal), and reading topographic maps will be introduced in the classroom and expanded upon during a two-day overnight field trip.

NATURAL RESOURCES (NR)

NR 1  INTRODUCTION TO NATURAL RESOURCES – 3 Units (CR/NC Option) (F)
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.

NR 6  NATIVE PLANT IDENTIFICATION - 3 Units (CAN# AG-NR 12) (S)
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.

NR 8  CAREER PLACEMENT – NATURAL RESOURCES - 1 Unit (S)
Class Hours: 18 lecture total
This course will assist the students in learning application and interview techniques. Students will develop an employment portfolio, and will be given an opportunity to interview with potential employers. It is the purpose of the class to help the student obtain the best employment for their summer work experience and upon graduation from college.

NR 50  NATURAL RESOURCES MEASUREMENTS – 3 Units (CR/NC Option) (F)
Class Hours: 36 lecture/54 lab total
Students will learn basic measurement and inventory skills for ecosystem components including vegetation, water, soils, timber cruising, and forest measurement methods. Surveying and inventory skills will require the use of equipment such as the compass, chain, clinometer, prism, Biltmore stick, calipers, etc. A variety of cultural and environmental assessment protocols, including ecosystem inventory (data collection and entry) will be included in the class. Safety practices in the outdoor environment will also be emphasized.

NR 59  OUTDOOR RECREATION & INTERPRETATION OF NATURAL RESOURCES - 3 Units (CR/NC Option) (F)
Class Hours: 36 lecture/54 lab total
A study of the development and management of outdoor recreational areas, both private and governmental facilities. Course will include historical, economic, social, and political aspects of outdoor recreation including an emphasis on the special considerations of wilderness management. This course will also include an introduction to the interpretation of natural resources including an overview of theory and techniques for planning, developing, and implementing speeches, narrative talks, and interpretive programs as they relate to natural resources. An emphasis will be placed on organization and composition of these presentations and on developing displays and interpretive trails.

NR 64  WATER RESOURCES - 3 Units (CR/NC Option) (F)
Class Hours: 36 lecture/54 lab total
This course addresses a variety of topics concerned with the quality and quantity of water resources. Emphasis will be on the State of California. Coverage will include the hydrologic cycle, water budgets, water-soil balance, and climatic controls thereof. 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. Field trips to various district facilities, federal, state, county, city, and private agencies will occur as feasible.
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<th>Course Code</th>
<th>Course Title</th>
<th>Units (CR/NC Option)</th>
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<tr>
<td>NR 65</td>
<td>FOREST ECOLOGY (formerly NR 165)</td>
<td>3</td>
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<td><strong>Class Hours:</strong> 36 lecture/54 lab total</td>
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<td>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. This course may be offered in a distance learning format.</td>
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| NR 66      | WATERSHED RESTORATION PRACTICUM                      | 1                     | (F/S)     |
|            | **Class Hours:** 54 lab total                         |                       |           |
|            | This course will use the hydrologic watershed unit as the focus which will provide a hands-on approach to ecosystem management, erosion control, sediment control, and stream restoration. The course will emphasize how restoring resource values requires an interdisciplinary scientific approach and community-wide participation to protect, enhance and restore. **Note:** Since subject matter varies each time the course is taught, based on the type and availability of community-based projects, this course may be repeated one time. |

| NR 67      | ENERGY AND THE ENVIRONMENT                            | 3                     | (I)       |
|            | **Class Hours:** 36 lecture/54 lab total               |                       |           |
|            | The focus of this course is on the environmental, technological, political and economic aspects of energy production, development and use. Conventional sources of energy production and use are, today, being scrutinized due to environmental concerns, and political and economic reasons. Alternative sources of energy are consequently being researched, developed and adopted. The role of the alternatives is becoming increasingly important. Practical aspects of energy conservation, such as weatherization, solar home construction, and lifestyles will be discussed. Short field trips to local energy production sites will be part of the class. |

| NR 69      | BIRDS AND THEIR HABITAT                               | 2                     | (I)       |
|            | **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. 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. |

| NR 70      | WILDLIFE CONSERVATION AND MANAGEMENT                  | 3                     | (S)       |
|            | **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. |

| NR 83      | INTRODUCTION TO GLOBAL POSITIONING SYSTEMS (GPS)      | 1                     | (F/S)     |
|            | **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. |

| NR 97      | SPECIAL TOPICS IN NATURAL RESOURCES                   | .5-2                  | (I)       |
|            | **Class Hours:** 9-36 lecture total                    |                       |           |
|            | This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in natural resources. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. **Note:** Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. |

| NR 98      | SPECIAL TOPICS IN NATURAL RESOURCES LAB SKILLS        | .5-2                  | (I)       |
|            | **Class Hours:** 27-108 lab total                     |                       |           |
|            | This course is designed to give students an opportunity to explore a variety of topics in a lab setting dealing with changing knowledge in natural resources. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. **Note:** Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments. |

*F* and *S* indicate semester course is usually offered. *I* indicates course may not be offered every year. Subject to change. Check the current class schedule.
NR 100  NATURAL RESOURCES SUMMER PRACTICUM  - .5 Unit (Summer)
Class Hours: 27 distance learning total
This course is designed to develop and enhance skills related to recording scientific data and making detailed field observations. Students will be required to keep and maintain a field notebook during the semester. Students will also be required to document in detail any new skills or techniques learned during the course of the semester. In addition, course content will cover issues related to being a good employee, communicating with your employer and coworkers, getting the most out of field experiences, conflict resolution, and being a productive member of a team. This course is offered through the Distance Education format.

NR 173  BEGINNING TAXIDERMY - 2 Units  (CR/NC Option) (S)
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.

NR 174  INTERMEDIATE TAXIDERMY - 2 Units  (CR/NC Option) (S)
Advisory: A grade of C or higher in NR 173
Class Hours: 18 lecture/54 lab total
An introduction to taxidermy of small mammals, reptiles and fish. Advanced techniques in bird taxidermy are also presented. Instruction will include game laws, tools and materials, skinning, tanning, mounting and display. A variety of artificial habitats will be employed. Students will supply their own specimens.

NR 176  WILDLIFE OF NORTHERN CALIFORNIA - .5 Unit  (CR/NC Option)  (F)
Note: Overnight field trip will be required.
Class Hours: 9 lecture/18 lab total
The common species of birds and mammals found in Northern California will be observed and discussed. Habitat management and conversation problems will be covered in the class. A weekend field trip to the Tulelake area will be required.

NR 197  SPECIAL TOPICS IN NATURAL RESOURCES - .5-2 Units  (CR/NC Only)  (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in natural resources. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for agriculture, natural resources, and environmental horticulture majors; open to anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

NATURAL SCIENCE  (NSCI)

NSCI 30  SCIENCE COLLOQUIUM (formerly INTR 30) - 1 Unit (CR/NC Only)  (S)
Note: Highly recommended for all science majors
Class Hours: 18 lecture total
This guest-lecture series will feature a broad range of professional scientists invited to summarize research and current issues from their disciplines. Topics will emphasize the bridge between the science (astronomy, biology, chemistry, environmental science, geology, physics and medicine) and society. A schedule of topics and invited speakers will be posted at the beginning of the semester. Note: Due to the topics differing each semester, this course may be repeated three times for a total of four enrollments.

NSCI 97  SPECIAL TOPICS IN INTERDISCIPLINARY STUDIES (formerly INTR 97) - .5-2 Units (CR/NC Option)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with Interdisciplinary Studies. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for anyone with an interest in the topic. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

NSCI 390  NATURAL SCIENCE LEARNING LAB - 0 Units  (I)
Class Hours: TBA
A program and facility designed to provide the student with the resources for self-paced auto-tutorial, computer tutorial, and audio-visual learning within various courses in Natural Science. Tutorial assistance is also available for students in Natural Science courses who experience some difficulty in a particular course or subject area.

NURSING
See Registered Nursing or Vocational Nursing
OFFICE ADMINISTRATION (OAS)

OAS 51  KEYBOARDING I (BEGINNING TYPING) (formerly BUSI 51) - 3 Units (CR/NC Option) (F/S)
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This is a beginning course in keyboarding on the computer. Class includes learning to type alphabetic, numeric and symbol keys by touch; developing speed and accuracy; and formatting business documents such as letters, memos, reports, tables and business forms. Recommended for all students with less than one year of high school typing or typing speed of less than 40 wpm. No prior knowledge of computers is required to enroll. This course may be offered in a distance learning format.

OAS 52  KEYBOARDING II (INTERMEDIATE TYPING) (formerly BUSI 52) - 3 Units (CR/NC Option) (F/S)
Prerequisite: A grade of C or higher in OAS 51 or OAS 91
Advisory: Ability to type 25 wpm
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This course continues the development of keyboard speed and accuracy and emphasizes the formatting of various kinds of business correspondence, reports, tables, forms, and desktop publishing projects from unarranged and rough-draft sources. This course provides preparation for Microsoft Office User Specialist (MOUS) Word Certification. This course may be offered in a distance learning format.

OAS 53  KEYBOARDING III (ADVANCED AND TECHNICAL TYPING) (formerly BUSI 53) - 3 Units (CR/NC Option) (F/S)
Prerequisite: A grade of C or higher in OAS 52
Advisory: Ability to type 45 wpm
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This is a finishing course in keyboarding to enable the student to meet business requirements. The course is designed to give additional practice in building speed and accuracy and to apply previously learned word processing and 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 learning format.

OAS 58  WORD PROCESSING TRANSCRIPTION (formerly BUSI 58) - 3 Units (CR/NC Option) (F/S)
Advisory: A grade of C or higher in OAS 52 and a grade of C or higher in BUAD 166
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center.
Class Hours: 36 lecture/54 lab total
This course is designed to prepare students to become efficient operators of transcribing machines and be able to transcribe quickly and accurately mailable business correspondence from pre-dictated material. Emphasis will be placed on the mechanics of letter styles, memos, reports, and tables, as well as grammar, punctuation, spelling, vocabulary, and proofreading.

OAS 60  OFFICE TROUBLESHOOTING (formerly MIS 60) – 1 Unit (CR/NC Option) (S)
Advisory: A grade of C or higher in CIS 70
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center.
Class Hours: 18 lecture/9 lab total
This course will provide instruction on the operation, maintenance, and use of manuals for office equipment – computer, fax, scanner, copy machine, and computer projector. The course is designed to assist the student in developing procedures for implementing solutions to daily problems encountered in the high-technology work place. The student will learn to set up a PC workstation with accompanying peripherals, install new software, and install hardware drivers. The importance of backups will be stressed along with maintaining and organizing computer files and folders. The student will be exposed to realistic hardware/software problems encountered in the workplace and learn methods for controlling and enhancing the computer environment.

OAS 63  VOICE RECOGNITION SOFTWARE – 1 Unit (CR/NC Option) (F/S)
Class Hours: 18 lecture/9 lab total
This course introduces voice-recognition software to the student through multi-media lecture/demonstration/discussion and hands-on application using the IBM compatible microcomputer. Using voice-recognition software (Dragon Naturally Speaking), the students will input information into the computer by voice rather than by keyboard. It will focus on learning dictation commands and techniques for continuous voice dictation. The course covers voice commands for inputting, formatting and editing documents as well as for using menus and mouse commands.

*“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year.
Subject to change. Check the current class schedule.
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. A required course for Accounting Clerk and Information Processing Specialist Certificate Programs. It is also a suggested elective in the Agriculture-Business and Agriculture-Industrial majors. This course has been designed for the hearing impaired. This course may be offered in a distance learning format.

**OAS 70**

**DESKTOP PUBLISHING (formerly BUSI 85) - 1 Unit (CR/NC Option) (I)**

**Advisory:** A grade of C or higher in OAS 91. Ability to type 25 wpm

**Note:** Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. For the Internet section of this course the student should have the necessary/current software to complete work off-campus.

**Class Hours:** 18 lecture/9 lab total

An introduction to desktop publishing and its uses in business and industry through use of desktop publishing software (i.e., MS Publisher, PageMaker, PrintMaster). Students should gain an understanding of basic desktop terminology, design, and layout by producing a variety of documents with varying degrees of difficulty.

**OAS 80**

**OUTLOOK – 1 Unit (CR/NC Option) (I)**

**Advisory:** Basic knowledge of word processing and windows.

**Note:** Class will require outside time using a computer with appropriate software. Some access is allowed on campus at the Math and Business Learning Center. For the Internet section of this course the student should have the necessary/current software to complete work off-campus.

**Class Hours:** 18 lecture/9 lab total

This is a basic computer graphics course designed especially for office administration students and those interested in an elementary graphics course. This course should enable students to develop their own graphics and text styles with little or no previous training in graphic arts. The course focuses on graphic rendering and design. This course may be offered in a distance learning format.

**OAS 84**

**OFFICE ADMINISTRATION WORKSITE LEARNING - 1-4 Units**

**Limitation on Enrollment:** To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester.

**Note:** During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)

**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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

**OAS 91**

**WORD FOR WINDOWS - 1 - 1 Unit (CR/NC Option) (F/S)**

**Advisory:** Ability to type 25 wpm

**Note:** Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to (and a working knowledge of) the Internet, plus access to the software Windows 98 (or better) and Word 2002.

**Class Hours:** 18 lecture/9 lab total

This course introduces word processing through multi-media lecture/demonstration/discussion using Microsoft WORD for Windows on the IBM compatible microcomputer. Microsoft WORD will be used to complete the functions of creating, editing, saving, opening and printing documents with varying degrees of difficulty. Topics to be covered include: file management; creating new documents using both the blank Word document screen or wizards and templates; selecting text to move/copy/delete/format or utilize the clipboard; creating and formatting tables, including calculations; spelling and thesaurus tools; font, paragraph and page formatting; customized tabs; indents; bullets and numbering; borders and shading; headers, footers, and page numbering; finding and replacing. This course may be offered in a distance learning format.
### OAS 92  WORD FOR WINDOWS - II  - 1 Unit (CR/NC Option) (F/S)

**Advisory:** A grade of C or higher in OAS 91 or OAS 51. Ability to type 25 wpm

**Note:** Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to and (a working knowledge of) the Internet, plus access to the software Windows 98 (or better) and Word 2002.

**Class Hours:** 18 lecture/9 lab total (*when offered in the Distance Education format, hours will total 63*)

This course combines the skills previously learned in word processing and spreadsheet and also provides experience working with database and presentation software using Microsoft Office XP. The course will teach students how to integrate these applications. Students will also receive and send electronic messages as well as create contacts in an address book. Students will be asked to compose short messages as a boss would request in an office. This course may be offered in a distance learning format.

### OAS 93  WORD FOR WINDOWS - III  - 1 Unit (CR/NC Option) (F/S)

**Prerequisite:** A grade of C or higher in OAS 92  

**Advisory:** Ability to type 25 wpm

**Note:** Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Learning Center. Students taking the Internet format of this course must have access to and (a working knowledge of) the Internet, plus access to the software Windows 98 (or better) and Word 2002.

**Class Hours:** 18 lecture/9 lab total (*when offered in the Distance Education format, hours will total 63*)

This course is designed to expand and improve basic word processing skills to a higher level of proficiency through multi-media lecture/demonstration/discussion on an IBM compatible microcomputer. Instruction will include a review of 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 learning format.

### OAS 94  POWERPOINT - 1 Unit (CR/NC Option) (F/S)

**Advisory:** Ability to type 25 wpm. Familiarity with Word Processing.

**Note:** Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to and (a working knowledge of) the Internet, plus access to the software Windows 98 (or better) and Word 2002.

**Class Hours:** 18 lecture/9 lab total (*when offered in the Distance Education format, hours will total 63*)

This is a hands-on course designed to familiarize students with Microsoft PowerPoint. Students will learn how to create effective slide show presentations with emphasis on customizing text, graphics and charts. Students will work with embedded and linked objects as well as hyperlinks and use PowerPoint’s many slide show features. This course may be offered in a distance learning format.

### OAS 96  INTEGRATED COMPUTER APPLICATIONS - 2 Units (CR/NC Option) (S)

**Advisory:** A grade of C or higher in OAS 91 or OAS 51; and a grade of C or higher in CIS 10

**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 and a working knowledge of the Internet plus access to the software Windows 98 (or better) and Office XP Professional.

**Class Hours:** 27 lecture/27 lab total (*when offered in the Distance Education format, hours will total 108*)

This course combines the skills previously learned in word processing and spreadsheet and also provides experience working with database and presentation software using Microsoft Office XP. The course will teach students how to integrate these applications. Students will also receive and send electronic messages as well as create contacts in an address book. Students will be asked to compose short messages as a boss would request in an office. This course may be offered in a distance learning format.

### OAS 97  SPECIAL TOPICS IN OFFICE ADMINISTRATION - .5-2 Units (CR/NC Option) (I)

**Class Hours:** 9-36 lecture total

This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in office administration. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes.

**Note:** Since subject matter varies each time the course is taught, it is repeatable three times for a total of four enrollments.

### OAS 98  SPECIAL LAB TOPICS IN OFFICE ADMINISTRATION - .5-2 Units (CR/NC Option) (I)

**Class Hours:** 27-108 lab total

This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in office administration. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes.

**Note:** Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

### OAS 112  BASIC ICD-9-CM AND CPT-4 CODING (formerly HEOC 112 and MEDA 156 and MEDA 156A) - 3 Units (F/S)

**Prerequisite:** A grade of C or higher in HEOC 110

**Corequisite:** Students must be concurrently enrolled in, or have completed HEOC 111 with a grade of C or higher

**Class Hours:** 54 lecture total

This course is a basic introduction to ICD-9-CM and CPT-4 coding for medical billing. 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 ICD-9-CM and CPT-4 coding books and develop skills in assigning accurate codes. The student will use acceptable coding guidelines through practical application.

*"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.

Subject to change. Check the current class schedule.*
OAS 113  ADVANCED ICD-9-CM AND CPT-4 CODING - 3 Units  (F/S)
Prerequisite: A grade of C or higher in OAS 112
Class Hours: 54 lecture total
This course has been designed to enable the learner to interpret health record documentation for code assignment. Students will apply National Correct Coding Initiative guidelines.

OAS 150  MEDICAL INSURANCE BILLING (formerly MEDA 150B) - 3 Units  (F/S)
Advisory: A grade of C or higher in OAS 51 and HEOC 110
Class Hours: 54 lecture total
This course is designed to prepare students for entry-level positions in the 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.

OAS 152  KEYBOARDING FOR SPEED AND ACCURACY (formerly OAS 268 and OAS 268AD and BUSI 268AD) - .5 Unit (CR/NC Option)  (F/S)
Advisory: Ability to type 20 wpm (students not typing at 20 wpm may wish to enroll in OAS 51)
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center. Students taking the Internet format of this course must have access to the latest Microsoft Operating System and Office Suite.
Class Hours: 27 lab total (when offered in the Distance Education format, hours will total 27)
A course designed to help students improve their typing skills. Specific drills will be taught to correct individual typing deficiencies. Students at any level will be able to continue their development of keyboard control through repetitive typing of specific drills designed to improve both accuracy and speed. This course may be offered in a distance learning format.

OAS 154  MICROCOMPUTER KEYBOARDING (formerly MIS 154 and BUSI 154) - .5 Unit (CR/NC Option)  (F/S)
Class Hours: 27 lab total
Designed to provide the intensive drill necessary to learn the alphabetic keys of the microcomputer keyboard. A beginning class intended for students needing a computer terminal keyboard skill who have had no previous typing experience. Student will be required to access software and key in data. Includes speed and accuracy development. This course does not have any document preparation or formatting instruction and does not meet the requirement of Beginning Typing for an Associate in Arts degree or certificate.

OAS 157  OFFICE PROCEDURES (formerly BUSI 157) - 3 Units (F/S)
Advisory: A grade of C or higher in OAS 51, and a grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total
A capstone course in office technology. Content includes office ethics, greeting office callers, telephone techniques, working with others on the job, mail procedures, filing procedures, reference sources, appointment/calendaring, office reprographics, employment testing, and career planning.

OAS 158  MEDICAL OFFICE PROCEDURES (formerly BUSI 158) - 3 Units (F/S)
Advisory: A grade of C or higher in OAS 51; and a grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total
This is an essential class for students wishing to work in a medical office. Content includes: understanding the medical practice, the unique issues of working in a medical office, interacting with patients, dealing with insurance and finances, scheduling appointments, and obtaining employment.

OAS 159  WORD PROCESSING I-MEDICAL TRANSCRIPTION (formerly BUSI 159A) - 1.5 Units (CR/NC Option)  (F/S)
Prerequisite: A grade of C or higher in HEOC 110 and OAS 52
Advisory: A grade of C or higher in each of the following courses: BUAD 166, OAS 58, and OAS 171
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center.
Class Hours: 18 lecture/27 lab total
A course designed to help the student reinforce and expand knowledge of medical vocabulary and to acquire transcription skills through the typing of medical notes, reports, and diagnostic case histories.

OAS 160  WORD PROCESSING II-MEDICAL TRANSCRIPTION (formerly BUSI 159B) - 1.5 Units  (S)
Prerequisite: A grade of C or higher in OAS 159
Note: Class will require outside time using a computer with appropriate software. Some computer access is provided on campus at the Math and Business Learning Center.
Class Hours: 18 lecture/27 lab total
The second half of a semester program designed to help the student acquire entry-level skills in the medical transcription field. 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.
OAS 162  LEGAL FORM PREPARATION (formerly BUSI 160A) - 3 Units (I)
Prerequisite: A grade of C or higher in LEGL 139
Advisory: Ability to type 25 wpm
Class Hours: 36 lecture/54 lab total
This course is designed to help the student acquire entry-level skills in the formatting of the most commonly used legal forms.

OAS 166  RECORDS MANAGEMENT (formerly BUSI 163) - 2 Units (F/S)
Class Hours: 36 lecture/9 lab total
A study of the basic principles, rules, and procedures of filing. It includes a study of alphabetic, numeric, subject, and geographic filing and of the various types of filing equipment. A required course for Medical Billing Specialist Certificate, Medical Office Specialist Degree, Information Processing Specialist Certificate and Information Processing Specialist Degree, Records Manager Certificate, Administrative Assistant Degree, Administrative Assistant-Legal Degree, Transcriptionist Legal Certificate and Medical Transcriptionist Degree.

OAS 171  PROOFREADING SKILLS (formerly BUSI 168) - 2 Units (F/S)
Advisory: A grade of C or higher in BUAD 166. Ability to type 25 wpm.
Class Hours: 36 lecture total
The application of appropriate methods of proofreading documents common to the work place. An overview of the essential skills needed to perform text-editing functions in business settings. A high level of proofreading skills is vital to the efficient operation and productivity of the word/information-processing office. Proofreading has become a "must" for quality control in the work place.

OAS 197  SPECIAL TOPICS IN OFFICE TECHNOLOGY - .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of Office Technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for any of the Office Technologies majors or Business majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.

OAS 198  SPECIAL LAB TOPICS IN OFFICE TECHNOLOGY - .5-2 Units (CR/NC Option) (I)
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in office technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.

OAS 250  KEYBOARDING I (BEGINNING TYPING) - ADAPTIVE (formerly OAS 250AD and BUSI 250AD) - 3 Units (CR/NC Option) (F/S)
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 Keyboarding I (Beginning Typing) for an Associate in Arts degree or certificate.

OAS 254  ADAPTIVE MICROCOMPUTER KEYBOARDING (formerly MIS 251 and MIS 251AB and BUSI 251AB) - 1.5 Units (CR/NC Only) (F/S)
Class Hours: 81 lab total
A personal-use individualized course in keyboarding designed to meet the needs of students with disabilities. Interested students must be interviewed by the Learning Disabilities Specialist and/or the Physical Disabilities Counselor and the instructor to determine if the course is appropriate for the student's abilities and interests and to make arrangements for tutoring. The course is designed to provide the intensive drill necessary to master the alphabetic keys as well as numbers and symbols of the microcomputer keyboard. A beginning class intended for students needing a computer terminal keyboarding skill who have had no previous typing experience. Students will be required to access software and key in data. Includes speed and accuracy development. This course may introduce document production if keyboard is mastered by touch. This class does not meet the requirement of Keyboarding I (Beginning Typing) for an Associate in Arts degree or certificate. Note: This course may be repeated two times for a total of three enrollments since course content varies and skills are enhanced by supervised repetition and practice.

PHILOSOPHY (PHIL)

PHIL 6  INTRODUCTION TO PHILOSOPHY - 3 Units (CR/NC Option) (CAN # PHIL 2) (F/S)
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A transfer humanities course introducing students to the major issues which philosophers have found important. It will explore what is special about the questions philosophers ask, and it will consider the most famous answers which philosophers have tried to give to those questions. Areas covered include philosophy of mind, theory of knowledge, metaphysics, moral philosophy, political philosophy, aesthetics, and philosophical theology. This course may be offered in a distance learning format.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.
PHIL 7  ETHICS AND PERSONAL VALUES - 3 Units (CR/NC Option) (CAN # PHIL 4) (F/S)
Advisory: A grade of C or better in ENGL 1A or English Placement Level 7
Hours: 54 lecture total
Introduces students to a range of moral and social problems which are important in themselves and which philosophers have found especially interesting. Emphasis will be given to exploring all the positions which can be taken on these issues, and to evaluating the arguments which can be given for those positions. Topics covered include general moral theories, abortion, euthanasia, capital punishment, warfare, gender and sexuality issues, political and economic issues, and the moral status of the natural world.

PHIL 8  LOGIC - 3 Units (CR/NC Option) (CAN # PHIL 6) (F/S)
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Logic is the science that evaluates arguments. PHIL 8 provides students with extensive experience in identifying a range of correct and incorrect argument forms. Examples will come from everyday life. Students will also learn to use both the traditional categorical syllogism and modern statement logic. This course may be offered in a distance learning format.

PHIL 10  LIFE AND DEATH MORAL ISSUES - 3 Units (CR/NC Option) (F/S/I)
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total
This course will explore in detail the entire range of life and death moral issues which philosophers consider. These issues include abortion, euthanasia, capital punishment, warfare, self-defense cases, various crisis cases, cloning and stem cell research, among others. We will examine both the various moral claims made about these issues and the arguments presented in defense of those claims. This course can serve as an introduction to moral philosophy in particular, and to philosophy in general. The issues covered in this course should be of intrinsic interest to everyone.

**PHYSICAL EDUCATION     (PE)**

HEALTH AND WELLNESS

PE 4  LIFETIME FITNESS - 3 Units (CR/NC Option) (F/S)
Class Hours: 45 lecture/27 lab total
In keeping with the primary purpose of Wellness, this course is designed to provide insight relative to the values derived by enriching the quality of our lives. Further, it includes the mechanisms for identifying individual needs and providing the means for measurement and improvement of lifestyles to reach a higher level of well being. This course provides a personalized approach to assess and prescribe the necessary programs to improve the components of physical fitness and wellness. In addition to the health related components of physical fitness (cardiovascular, muscular strength and endurance, muscular flexibility, body composition), topics covered include nutrition and weight control, cardiovascular risk reduction, stress management, drug and alcohol abuse, AIDS, and environmental health issues. This course further prepares enrollees in successfully passing certification testing conducted by National Council on Strength and Fitness.

PHYSICAL EDUCATION/FITNESS & CONDITIONING

PE 6  AEROBIC INSTRUCTOR TRAINING – 2 Units (CR/NC Option) (F/S)
Class Hours: 27 lecture/27 lab total
A comprehensive class covering current materials on exercise science as related to aerobic exercise instruction. Theories of aerobic training, strength and endurance development and exercise analysis are presented. Students will develop skills for creating aerobic exercises and dance choreography, low/high impact modification, formatting and cueing techniques. Written examinations and instructor critique on all materials may result in the student obtaining a certificate of completion.

PE 10  FOUNDATIONS OF HUMAN MOVEMENT AND EXERCISE PHYSIOLOGY (formerly HPE 8) - 3 Units (CR/NC Option) (F/S)
Class Hours: 54 lecture total

PE 11  FUNDAMENTAL CONDITIONING (formerly HPE 1AD) - .5-1.5 Units (CR/NC Option) (F/S)
Class Hours: 27, 54, or 81 total activity
Designed to acquaint the student with exercises, activities and use of muscles to perform specific tasks and to improve physical well-being. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 12  WEIGHT TRAINING (formerly HPE 24AD) - .5-1.5 Units (CR/NC Option) (F/S)
Class Hours: 27, 54, or 81 total activity
A course in weight training and general conditioning. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.
Activity can include aerobics, whirlpool, weights, massage, stairmaster, swimming, and general exercise. Use of the pools, gymnasium, weight room, and cardio room, in an individualized activity program developed for each student.

PE 27  ADAPTED AQUATICS FOR THE PHYSICALLY LIMITED -.5-2 Units (CR/NC Option) (F/S)
Class Hours: 27-108 lab total
Aquatic exercise designed to provide a program of activities for those students who are unable to participate in a regular physical education aquatic program because of physical or mental impairments. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 21  EXERCISE FOR ORTHOPEDIC DISORDERS OR INJURIES (form. HPE 73AD) - 1 Unit (CR/NC Option) (F/S)
Class Hours: 54 total activity
Exercise for orthopedic disorders is designed to provide a program of activities suitable for those students who are unable to participate in a regular physical education program because of orthopedic injury or disorders. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 23  EXERCISE FOR RESPIRATORY DISORDERS (formerly HPE 76AD) - 1 Unit (CR/NC Option) (F/S)
Class Hours: 54 total activity
Exercise designed to provide a program of activities suitable for those students who are unable to participate in a regular physical education program because of respiratory disorders. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 26  ADAPTED WEIGHT TRAINING - .5-2 Units (CR/NC Option)
Class Hours: 27-108 lab total
Strength and flexibility development through supervised progressive exercise. Includes initial assessment, exercise prescription and equipment, and technique instruction. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 27  ADAPTED AQUATICS FOR THE PHYSICALLY LIMITED - .5-2 Units (CR/NC Option)
Class Hours: 27-108 lab total
Aquatic exercise designed to provide a program of activities for those students who are unable to participate in a regular physical education aquatic program because of physical or mental impairments. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.
**AQUATICS**

**PE 30  SWIMMING (formerly HPE 40AD)** - .5-1 Unit (CR/NC Option)  (F/S)

Class Hours: 27 or 54 total activity
This class is designed to offer instruction in aquatic skills necessary for survival, efficiency in swimming and diving, and conditioning in the aquatic environment. **Note:** This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

**PE 31  AQUA AEROBICS (formerly HPE 79AD)** - .5-1 Unit (CR/NC Option)  (F/S)

Class Hours: 27 or 54 total activity
Aqua aerobics is an activity class covering basic aquatic exercises. Water is the perfect medium providing natural resistance for toning, firming, and strengthening. Body alignment, heart rates, fun, and pleasure without strain will be included. **Note:** This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

**PE 32  WATER POLO (formerly HPE 44AB)** - .5-1 Unit (CR/NC Option)  (I)

Class Hours: 27 or 54 total activity
A course designed to acquaint students with the sport of water polo. Emphasis on rules, individual skills, team play, and game strategy. **Note:** This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

**PE 33  PADDLE SPORTS (formerly HPE 59AB)** - .5-1 Unit (CR/NC Option)  (I)

Class Hours: 27 or 54 total activity
This course is designed to offer instruction in canoeing or kayaking. The course will cover material on types of canoes or kayaks, their uses, basic paddling strokes, reading moving water, use of safety and rescue equipment and personal rescue techniques. **Note:** This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

**PE 35  LIFEGUARD TRAINING (formerly HPE 43AB)** - 2 Units (CR/NC Option)

Advisory: Red Cross Level VII swimming skills.
Class Hours: 27 lecture/27 lab total
A course designed to provide training and prepare student for certification in American Red Cross Lifeguard Training, Professional Rescuers CPR, and First Aid Basics. **Note:** This class may be repeated any number of times for credit by students who are legally mandated to meet training requirements as a condition of continued pay or volunteer employment.

**PE 36  WATER SAFETY INSTRUCTORS (formerly HPE 54)** - 1.5 Units  (CR/NC Option)

Class Hours: 18 lecture/27 lab total
A course designed to provide laboratory experience in the methodology of American Red Cross swimming instruction. Emphasis is placed on practical application of instructional theory used at all levels of swimming instruction. **Note:** This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

**PE 37  SPRINGBOARD DIVING** - .5-1 Unit (CR/NC Option)  (I)

Class Hours: 27 or 54 total activity
A course designed to present skills and techniques of one and three meter diving, and diving performance criteria. **Note:** This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

**PE 38  SNORKELING** - .5 Unit (CR/NC Option)

**Note:** 1) Students will need to have appropriate equipment (mask, fins, snorkel, wet suit, wet belt, and buoyancy compensator). 2) Students will need to provide own transportation for field trips which will be arranged at the first class meeting. Class will meet at Shasta College pools for first 9-hours and by arrangement off-campus for 18-additional hours.
Class Hours: 27 total activity
A course designed to provide theory and practical skills required for safe and enjoyable snorkeling/free-diving in lake, stream, or ocean.

**PE 39  BASIC SAILING** - 1 Unit (CR/NC Option)

Advisory: Safe swimmer
Class Hours: 54 lab total
This course will offer instruction on the basic art of sailing. Topics will include boater safety, boat parts identification, boat set up and breakdown, boat launching, sail trim, rudder control, righting the boat in case of capsize and on-the-water right of way. **Note:** This course may be repeated once for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

**DANCE**

For Dance courses, refer to DAN in the catalog
RACQUET SPORTS

PE 50  RACQUETBALL (formerly HPE 25AD) - .5-1.5 Units (CR/NC Option) (F/S)
Class Hours: 27, 54, or 81 total activity
Course teaches the fundamental skills, knowledge and social courtesies necessary to participate in the game of racquetball. This course is designed for players with skills ranging from beginning to advanced. Physical and mental strategies are emphasized to enhance critical thinking ability. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 51  TENNIS (formerly HPE 35AD) - .5-1.5 Units (CR/NC Option) (F/S)
Class Hours: 27, 54, or 81 total activity
A course in fundamentals, techniques, rules of play, strategies, and social courtesies in singles and doubles play with the skill ranging from the beginner to the advanced. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 52  BADMINTON (formerly HPE 39AD) - .5-1.5 Units (CR/NC Option)
Class Hours: 27, 54, or 81 total activity
A course in fundamentals, techniques, rules of play, strategies and social courtesies in singles and doubles play with the skill ranging from the beginner to the advanced. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

INDIVIDUAL SPORTS AND TEAM SPORTS

PE 60  SELF-DEFENSE (formerly HPE 2AD) - .5-1.5 Units (CR/NC Option) (F/S)
Class Hours: 27, 54, or 81 total activity
This course will be conducted in such a manner that both the beginning and intermediate student will be able to learn and use basic to advanced skills. Self defense techniques will be introduced from basic to advanced levels. The student will acquire fundamental skills in stances, punches, blocks, kicks, and escaping techniques. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 61  GOLF (formerly HPE 32AD) - .5-1.5 Units (CR/NC Option) (F/S)
Class Hours: 27, 54, or 81 total activity
Designed to teach the fundamental skills and knowledge necessary to participate in the game of golf. A course for the beginning, intermediate, or advanced player who desires a review. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 62  ARCHERY (formerly HPE 38AD) - .5-1 Unit (CR/NC Option) (F/S)
Class Hours: 27 or 54 total activity
The archery class teaches the fundamentals skills and knowledge necessary to participate in the sport of archery; target and field. A multi-level course designed for the beginner, intermediate, or advanced archer. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 63  FOOTBALL (formerly HPE 3AD) - .5-1 Unit (CR/NC Option) (F/S)
Class Hours: 27 or 54 total activity
An activity course designed to teach skills and techniques of football. Team play is emphasized to prepare the beginner and intermediate player for competitive play. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 64  VOLLEYBALL (formerly HPE 6AD) - .5-1 Unit (CR/NC Option) (F/S)
Class Hours: 27 or 54 total activity
Designed to develop basic skills and an understanding and appreciation for the game of volleyball. The use of lecture, demonstration and drills/practice will provide the student with the opportunity for skill improvement. Rules, strategy, and team play will enhance the students knowledge to continue this activity at a higher level. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 65  SOFTBALL (formerly HPE 5AD) - .5-1.5 Unit (CR/NC Option) (F/S)
Class Hours: 27, 54, or 81 total activity
An activity course designed to teach skills and techniques of softball. Team play is emphasized to prepare the beginner and intermediate player for competitive play. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 66  BASEBALL (formerly HPE 5AD) - .5-1.5 Unit (CR/NC Option) (F/S)
Class Hours: 27, 54, or 81 total activity
An activity course designed to teach skills and techniques of baseball. Team play is emphasized to prepare the beginner and intermediate player for competitive play. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

PE 67  TRACK & FIELD TECHNIQUES (formerly HPE 12AD) - .5-1.5 Unit (CR/NC Option) (F)
Class Hours: 27, 54, or 81 total activity
An activity course designed to teach and practice fundamental skills of track and field. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year. Subject to change. Check the current class schedule.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>CR/NC Option</th>
<th>Offered</th>
<th>Class Hours</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>PE 74</td>
<td>SOCCER (formerly HPE 41AD)</td>
<td>.5-1.5</td>
<td>CR/NC Option</td>
<td>(F/S)</td>
<td>27, 54, or 81 total activity</td>
<td>A course designed to provide instruction on the history, theory, fundamental skills, strategies, and techniques of the game of soccer. <em>Note:</em> This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</td>
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<tr>
<td>PE 75</td>
<td>BASKETBALL (formerly HPE 44AD)</td>
<td>.5-1.5</td>
<td>CR/NC Option</td>
<td>(F/S)</td>
<td>27, 54, or 81 total activity</td>
<td>Designed to develop basic skills and understanding and appreciation for the game of basketball. The use of lecture, demonstration, and drills will provide the student with the opportunity for skill development. Rules, strategy, and team play will enhance the students knowledge to continue this activity at a higher level. <em>Note:</em> This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</td>
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<tr>
<td>PE 97</td>
<td>SPECIAL TOPICS IN PHYSICAL EDUCATION</td>
<td>.5-2</td>
<td>CR/NC Option</td>
<td>(I)</td>
<td>9-36 lecture total</td>
<td>This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in physical education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. <em>Note:</em> Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.</td>
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<tr>
<td>PE 98</td>
<td>SPECIAL TOPICS IN PHYSICAL EDUCATION - ACTIVITY</td>
<td>.5-2</td>
<td>CR/NC Option</td>
<td>(I)</td>
<td>27-108 total activity</td>
<td>This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in physical education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. <em>Note:</em> Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.</td>
</tr>
<tr>
<td>SPORT CLINICS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE 100</td>
<td>FOOTBALL CLINIC</td>
<td>.5</td>
<td>CR/NC Option</td>
<td>(I)</td>
<td>27-36 total activity</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in football. <em>Note:</em> This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</td>
</tr>
<tr>
<td>PE 101</td>
<td>VOLLEYBALL CLINIC</td>
<td>.5</td>
<td>CR/NC Option</td>
<td>(I)</td>
<td>27-36 total activity</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in volleyball. <em>Note:</em> This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</td>
</tr>
<tr>
<td>PE 102</td>
<td>BASKETBALL CLINIC</td>
<td>.5</td>
<td>CR/NC Option</td>
<td>(I)</td>
<td>27-36 total activity</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in basketball. <em>Note:</em> This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</td>
</tr>
<tr>
<td>PE 103</td>
<td>SOFTBALL CLINIC</td>
<td>.5</td>
<td>CR/NC Option</td>
<td>(I)</td>
<td>27-36 total activity</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in softball. <em>This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</em></td>
</tr>
<tr>
<td>PE 104</td>
<td>BASEBALL CLINIC</td>
<td>.5</td>
<td>CR/NC Option</td>
<td>(I)</td>
<td>27-36 total activity</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in baseball. <em>This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</em></td>
</tr>
<tr>
<td>PE 105</td>
<td>TENNIS CLINIC</td>
<td>.5</td>
<td>CR/NC Option</td>
<td>(I)</td>
<td>27-36 total activity</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in tennis. <em>This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</em></td>
</tr>
<tr>
<td>PE 106</td>
<td>GOLF CLINIC</td>
<td>.5</td>
<td>CR/NC Option</td>
<td>(I)</td>
<td>27-36 total activity</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in golf. <em>This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</em></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title (CR/NC Option)</td>
<td>Units</td>
<td>Class Hours</td>
<td>Description</td>
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</tr>
<tr>
<td>PE 107</td>
<td>SOCCER CLINIC</td>
<td>.5</td>
<td>27-36</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in soccer. <em>This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE 108</td>
<td>SWIMMING CLINIC</td>
<td>.5</td>
<td>27-36</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in swimming. <em>Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE 109</td>
<td>TRACK AND FIELD CLINIC</td>
<td>.5</td>
<td>27-36</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in track and field. <em>Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE 110</td>
<td>WRESTLING CLINIC</td>
<td>.5</td>
<td>27-36</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in wrestling. <em>Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition/practice.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE 111</td>
<td>CHEERLEADING CLINIC</td>
<td>.5</td>
<td>27-36</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques in cheerleading. <em>Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE 112</td>
<td>KARATE CLINIC</td>
<td>.5</td>
<td>27-36</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques, both physical and mental, of traditional Shotokan Karate. <em>Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE 113</td>
<td>BALLET CLINIC</td>
<td>.5</td>
<td>27-36</td>
<td>This short-term activity course will teach and build on fundamental skills and techniques, both physical and mental, of traditional ballet. <em>Note: This course may be repeated three times, for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE 197</td>
<td>SPECIAL TOPICS IN PHYSICAL EDUCATION</td>
<td>.5-2</td>
<td>9-36</td>
<td>This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in physical education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. <em>Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE 198</td>
<td>SPECIAL TOPICS IN PHYSICAL EDUCATION - ACTIVITY</td>
<td>.5-2</td>
<td>27-108</td>
<td>This course is designed to give students an opportunity to explore a variety of activities dealing with changing topics/knowledge in physical education. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. <em>Note: Since subject matter varies each time the course is taught, this course is repeatable three times for a total of four enrollments.</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NON-CREDIT - PHYSICAL EDUCATION**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title (CR/NC Option)</th>
<th>Units</th>
<th>Class Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 300</td>
<td>FITNESS FOR SENIORS</td>
<td>0</td>
<td>27-72</td>
<td>Modified postures for seniors that are specifically designed to provide gentle stretching, strengthening, and balancing with emphasis in increasing limberness and stamina.</td>
</tr>
<tr>
<td>PE 301</td>
<td>FITNESS FOR THE DEVELOPMENTALLY DISABLED</td>
<td>0</td>
<td>27-72</td>
<td>Modified exercises for the developmentally disabled person that are specifically designed to provide gentle stretching, strengthening, range of motion, with emphasis in increasing limberness and stamina. <em>Nutritional aspects of wellness will be discussed.</em></td>
</tr>
</tbody>
</table>

*“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year. Subject to change. Check the current class schedule.*
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>CR/NC Option</th>
<th>Notes</th>
</tr>
</thead>
</table>
| PEAT 2      | CLINICAL EXPERIENCES IN SPORTS MEDICINE (formerly HPE 91L) | 1-3 | CR/NC Option | (I)  
| Class Hours: | 54-162 total activity | 54-90 total activity | 1-3 units | (I) |
| Note:       | Theory, practice, and hands-on experience in athletic injury prevention, athletic emergency care, therapeutic treatment, and rehabilitation of athletic injuries in the Athletic Treatment Center. Note: This class may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice. | Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice. | |
| PEAT 3      | STRENGTH TRAINING & CONDITIONING FOR ATHLETES (formerly HPE 64AD) | .5-1.5 | CR/NC Option | (F/S) |
| Class Hours: | 27, 54, or 81 total activity | 27, 54, or 81 total activity | 1.5 units | (F/S) |
| Note:       | A course designed to provide specialized strength training program to meet the needs of athletes of various sports. Note: Since subject matter varies each time course is taught, course is repeatable three times for a total of four enrollments. | Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice. | |
| PEAT 4      | THEORY OF COACHING (formerly HPE 85/86) | 1 | CR/NC Option | (I)  
| Class Hours: | 18 lecture total | 18 lecture total | 1 unit | (I) |
| Note:       | A course designed to teach the coach or aspiring coach a greater understanding of coaching philosophies, sport pedology, sport physiology, adolescent psychology, sport medicine, and sport rules and regulations. Also, how to deal with parental dilemmas and ethical issues. | Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice. | |
| PEAT 5      | INTERCOLLEGIATE FOOTBALL (formerly HPE 14AB) | 2 | CR/NC Option | (F)  
| Class Hours: | 108-180 hours total | 108-180 hours total | 2 units | (F) |
| Note:       | Football instruction and practice at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.) | Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. | |
| PEAT 6      | THEORY OF FOOTBALL (formerly HPE 9AB) | 1 | CR/NC Option | (F)  
| Class Hours: | 18 lecture/18 activity total | 18 lecture/18 activity total | 1 unit | (F) |
| Note:       | A course designed to teach the rules, theory, and strategies of football. Note: This course may be repeated two times for a total of three enrollments. As the athletes skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction. | Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.) | |
| PEAT 7      | INTERCOLLEGIATE VOLLEYBALL (formerly HPE 61AB) | 2 | CR/NC Option | (F)  
| Class Hours: | 108-180 hours total | 108-180 hours total | 2 units | (F) |
| Note:       | Volleyball instruction, practice and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.) | Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. | |
| PEAT 8      | THEORY OF VOLLEYBALL (formerly HPE 52AB) | 1 | CR/NC Option | (F)  
| Class Hours: | 18 lecture/18 activity total | 18 lecture/18 activity total | 1 unit | (F) |
| Note:       | This course is designed to teach the theoretical and strategic aspects of volleyball. Note: This course may be repeated two times for a total of three enrollments. As the athlete’s skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction. (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.) | Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. | |
| PEAT 9      | INTERCOLLEGIATE CROSS COUNTRY (formerly HPE 29AB) | 2 | CR/NC Option | (F)  
| Class Hours: | 108-180 hours total | 108-180 hours total | 2 units | (F) |
| Note:       | Cross country instruction, practice and competition at the intercollegiate level. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.) | Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. | |
| PEAT 10     | THEORY OF CROSS COUNTRY (formerly HPE 30AB) | 1 | CR/NC Option | (F)  
| Class Hours: | 18 lecture/18 activity total | 18 lecture/18 activity total | 1 unit | (F) |
| Note:       | A course designed to teach the rules, theory and strategies of cross country. Note: This course may be repeated two times for a total of three enrollments. As the athletes skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction. | Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. | |
| PEAT 11     | INTERCOLLEGIATE BASKETBALL (formerly HPE 15AB) | 1 | CR/NC Option | (F/S)  
| Class Hours: | 54-90 lab hours total | 54-90 lab hours total | 1 unit | (F/S) |
| Note:       | Basketball instruction, practice and competition at the intercollegiate level. Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice. (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.) | Note: This course may be repeated three times for a total of four enrollments since skills and proficiencies are enhanced by supervised repetition and practice. | |
| PEAT 12     | THEORY OF BASKETBALL (formerly HPE 13AB) | 1 | CR/NC Option | (F)  
| Class Hours: | 18 lecture/18 activity total | 18 lecture/18 activity total | 1 unit | (F) |
| Note:       | A course related to the teaching of rules, theory and methods in basketball. Note: This course may be repeated two times for a total of three enrollments. As the athlete’s skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction. | Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. |
### INTERCOLLEGIATE SOFTBALL (formerly HPE 62AB) - 2 Units (CR/NC Option) (S)

**Note:** Tryouts may be required to determine performance capability  
**Class Hours:** 108-160 hours total  
Softball instruction, practice and competition at the intercollegiate level. **Note:** This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. *(If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)*

### THEORY OF SOFTBALL (formerly HPE 42AB) - 1 Unit (CR/NC Option) (S)

**Class Hours:** 18 lecture/18 activity total  
A course related to the teaching of rules, theory, strategies and methods in softball. Designed to enhance the performance of prospective intercollegiate softball athletes. **Note:** This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. *(If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)*

### INTERCOLLEGIATE BASEBALL (formerly HPE 16AB) - 2 Units (CR/NC Option) (S)

**Note:** Tryouts may be required to determine performance capability  
**Class Hours:** 108-180 hours total  
Baseball instruction, practice and competition at the intercollegiate level. **Note:** This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. *(If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)*

### THEORY OF BASEBALL (formerly HPE 10AB) - 1 Unit (CR/NC Option) (S)

**Class Hours:** 18 lecture/18 activity total  
A course designed to teach the rules, theory and strategies of competitive baseball. **Note:** This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

### INTERCOLLEGIATE TRACK AND FIELD (formerly HPE 18AB) - 2 Units (CR/NC Option) (S)

**Note:** Tryouts may be required to determine performance capability  
**Class Hours:** 108-180 hours total  
Track and field instruction, practice and competition at the intercollegiate level. **Note:** This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. *(If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)*

### THEORY OF TRACK AND FIELD (formerly HPE 28AB) - 1 Unit (CR/NC Option) (S)

**Class Hours:** 18 lecture/18 activity total  
A course designed to teach the rules, theory and strategies of track and field. **Note:** This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

### INTERCOLLEGIATE TENNIS (formerly HPE 17AB) - 2 Units (CR/NC Option) (S)

**Note:** Tryouts may be required to determine performance capability  
**Class Hours:** 108-180 hours total  
Tennis instruction, practice and competition at the intercollegiate level. **Note:** This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. *(If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)*

### THEORY OF TENNIS (formerly HPE 68AB) - 1 Unit (CR/NC Option) (S)

**Class Hours:** 18 lecture/18 activity total  
A course related to the teaching of rules, theory and methods in tennis. **Note:** This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.

### INTERCOLLEGIATE GOLF (formerly HPE 19AB) - 2 Units (CR/NC Option) (S)

**Note:** Tryouts may be required to determine performance capability  
**Class Hours:** 108-180 hours total  
Golf instruction, practice and competition at the intercollegiate level. **Note:** This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. *(If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)*

### THEORY OF GOLF (formerly HPE 69AB) - 1 Unit (CR/NC Option) (S)

**Class Hours:** 18 lecture/18 activity total  
A course designed to teach the rules, theory and strategies of golf. **Note:** This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. *(If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)*

### INTERCOLLEGIATE SOCCER (formerly HPE 71AB) - 2 Units (CR/NC Option) (F)

**Note:** Tryouts may be required to determine performance capability  
**Class Hours:** 108-180 hours total  
A course designed to provide advanced instruction on the skills, strategies, techniques and rules so that the student may play at the intercollegiate level of competition. **Note:** This course may be repeated two times for a total of three enrollments since proficiencies are enhanced by supervised repetition and practice. *(If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)*

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"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.  
Subject to change. Check the current class schedule.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>CR/NC Option</th>
<th>Offered</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEAT 24</td>
<td>THEORY OF SOCCER (formerly HPE 70AB)</td>
<td>1</td>
<td>CR/NC Option</td>
<td>F</td>
<td>A course designed to teach the rules, theory and strategies of competitive soccer. Note: This course may be repeated two times for a total of three enrollments. As the athlete’s skills and proficiencies are enhanced, the theoretical and strategic aspects become more complex and require additional instruction.</td>
</tr>
<tr>
<td>Class Hours</td>
<td>18 lecture/ 18 activity total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEAT 25</td>
<td>INTERCOLLEGIATE SWIMMING AND DIVING (formerly HPE 82AB)</td>
<td>2</td>
<td>CR/NC Option</td>
<td>S</td>
<td>A course designed for students interested in swimming at the competitive level. Daily practice spring semester, various trips for competition. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)</td>
</tr>
<tr>
<td>Class Hours</td>
<td>108-180 hours total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEAT 26</td>
<td>THEORY OF COMPETITIVE SWIMMING (formerly HPE 83AB)</td>
<td>1</td>
<td>CR/NC Option</td>
<td>S</td>
<td>A course designed to provide theory and practical skills required for students to compete in the sport of waterpolo against other college age students. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are developed by supervised repetition and practice. (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)</td>
</tr>
<tr>
<td>Class Hours</td>
<td>18 lecture/18 activity total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEAT 27</td>
<td>INTERCOLLEGIATE WATERPOLO</td>
<td>2</td>
<td>CR/NC Option</td>
<td>I</td>
<td>A course designed to provide information about the rules, theories, scientific basis, and condition of intercollegiate swimmers. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are developed by supervised repetition and practice. (If student desires to compete in conference matches, he/she must meet conference eligibility requirements.)</td>
</tr>
<tr>
<td>Class Hours</td>
<td>108-180 hours total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEAT 28</td>
<td>THEORY OF WATERPOLO</td>
<td>1</td>
<td>CR/NC Option</td>
<td>I</td>
<td>A course designed to teach the rules, theory, and strategies of waterpolo. As the athletes skills and proficiencies are developed, the theoretical and strategic aspects of the game become more complex and require additional instruction. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are developed by supervised repetition and practice.</td>
</tr>
<tr>
<td>Class Hours</td>
<td>18 lecture/18 lab total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEAT 29</td>
<td>INTERCOLLEGIATE WRESTLING</td>
<td>2</td>
<td>CR/NC Option</td>
<td>F</td>
<td>A course designed for students interested in wrestling at the competitive level. Daily practice fall semester, various trips for competition. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice. (If student desires to compete in conference matches, he/she must meet conference eligibility requirements).</td>
</tr>
<tr>
<td>Class Hours</td>
<td>96-180 lab total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEAT 30</td>
<td>THEORY OF WRESTLING</td>
<td>1</td>
<td>CR/NC Option</td>
<td>F</td>
<td>This course is to provide information about the rules, theories, scientific basis, and training method of intercollegiate wrestlers. Note: This course may be repeated two times for a total of three enrollments since skills and proficiencies are enhanced by supervised repetition and practice.</td>
</tr>
<tr>
<td>Class Hours</td>
<td>9 lecture/27 lab total</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PEAT 31</td>
<td>SPORT SAFETY TRAINING</td>
<td>.5</td>
<td>CR/NC Option</td>
<td>I</td>
<td>A course designed to train coaches and prospective coaches in the area of sport safety and first aid. Adult and child CPR is covered. Upon successful completion of this course, the student is eligible for American Red Cross Certification in sport safety training.</td>
</tr>
<tr>
<td>Class Hours</td>
<td>9 lecture total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEAT 94</td>
<td>WORKSITE LEARNING FOR ATHLETICS/COACHING</td>
<td>1-4</td>
<td></td>
<td>F/S</td>
<td>Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. To maintain financial aid eligibility a student must maintain enrollment in six units, not including Worksite Learning during the semester. Note: During summer session, Worksite Learning is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)</td>
</tr>
<tr>
<td>Class Hours</td>
<td>75 hours paid or 60 hours non-paid per unit</td>
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<td></td>
<td></td>
<td>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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice.</td>
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PHYSICAL SCIENCE (PHSC)

PHSC 1  PHYSICAL SCIENCE SURVEY - 4 Units (CR/NC Option) (F)
Advisory: A grade of C or higher in MATH 101, or Math Placement Level 3 or higher
Class Hours: 54 lecture/54 lab total
Lecture-discussion, demonstration and lab activities cover selected theories of physics and chemistry, emphasizing the conceptual basis of these theories. The course is designed for non-science majors as part of their general education requirement in science. This course is not appropriate for students who have taken college level physics or chemistry.

PHSC 2  GENERAL EARTH SCIENCE (formerly PHSC 2 and PHSC 3) - 4 Units (F/S/I)
Note: Required day 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, lecture hours will total 162)
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 a geologic evolution of the Earth, economic resources derived from the Earth, Earth materials, evolution and character of the oceans, ocean-atmosphere interactions, atmospheric processes including weather and climate, the solar system and Earth as part of the universe. The laboratory portion of this course provides hands-on activities that support and demonstrate lecture concepts.

PHSC 4  METEOROLOGY – 4 Units (S)
Class Hours: 54 lecture/54 lab total
Dynamic aspects of the atmosphere responsible for climate and weather represents 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, storms characteristics and climate controls and climate change.

PHSC 5  OCEANOGRAPHY – 4 Units (F/S/I)
Note: Required overnight field trip.
Class Hours: 54 lecture/54 lab total
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 land forms 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.

PHSC 6  COASTAL OCEANOGRAPHIC FIELD STUDIES – 2 Units (I)
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.

PHSC 7  EARTH SYSTEM SCIENCE – 3 Units (I)
Note: Day field trips may be required.
Class Hours: 54 lecture total
Earth is a dynamic plant, 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.

PHYSICS (PHYS)

PHYS 2A  GENERAL COLLEGE PHYSICS - 4 Units (CR/NC Option) (CAN# PHYS 2) (CAN PHYS SEQ A) (F)
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Class Hours: 54 lecture/54 lab total
This course provides an introduction to the principles and applications of mechanics, using the mathematical tools of algebra and right triangle trigonometry. Topics include vectors, kinematics, Newton’s Laws, gravity, energy and momentum, equilibrium of rigid bodies, fluids and simple harmonic motion.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.
PHYS 2B  GENERAL COLLEGE PHYSICS - 4 Units (CR/NC Option) (CAN# PHYS 4) (CAN PHYS SEQ A) (S)

Prerequisite: A grade of C or higher in PHYS 2A
Class Hours: 54 lecture/54 lab total
This course is a continuation of PHYS 2A, covering mechanical waves (including sound), electricity, magnetism, geometric optics, interference and diffraction and elementary quantum theory.

PHYS 4A  PHYSICS (MECHANICS) - 4 Units (CAN# PHYS 8) (CAN# PHYS SEQ B) (S)

Prerequisite: A grade of C or higher in MATH 3A, or Math Placement Level 6 or higher
Corequisite: Students must be concurrently enrolled in MATH 3B, or have completed MATH 3B with a grade of C or higher
Class Hours: 54 lecture/54 lab total
The fundamental principles of mechanics are treated within the mathematical framework of elementary differential and integral calculus. Vectors, Newton's Laws, work, energy gravitation, linear and angular momentum, rotational dynamics and motion studies are discussed.

PHYS 4B  PHYSICS (ELECTRICITY AND MAGNETISM) - 4 Units (CAN# PHYS 12) (CAN# PHYS SEQ B) (F)

Prerequisite: A grade of C or higher in MATH 3B or Math Placement Level 7; and a grade of C or higher in PHYS 4A
Class Hours: 54 lecture/54 lab total
The fundamental principles of electricity and magnetism are treated using vector integral calculus. Topics include Coulomb's Law, electric fields, potentials, Gauss' Law, Ohms Law, D-C circuits, Magnetism, Biot-Savart Law, Amperes Law, Capacitance, inductance and RC circuits.

PHYS 4C  PHYSICS (WAVES, MODERN PHYSICS & QUANTUM MECHANICS) - 4 Units (CAN# PHYS 14) (CAN# PHYS SEQ B) (S)

Prerequisite: A grade of C or higher in PHYS 4B, and a grade of C or higher in MATH 4A or Math Placement Level 7
Corequisite: Students must be concurrently enrolled in, or have completed MATH 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 general properties of waves, electromagnetic waves, reflection and refraction, interference and diffraction, the special theory of relativity, the quantum nature of light and the wave nature of matter, and Schrodinger's equation.

PHYS 101  TECHNICAL PHYSICS - 3 Units (CR/NC Option) (S)

Advisory: A grade of C or higher in MATH 102, or Math Placement Level 4
Note: One mandatory field trip will be required
Class Hours: 54 lecture total
A general physics course designed to explore applications of Physics for non-transfer students. This course is designed for students in (but not limited to) heavy-duty mechanics, automotive, drafting, sports, fire science and architecture.

PHYSIOLOGY  (PHY)

PHY 1  PHYSIOLOGY (formerly PHY 1/PHY 1L) - 5 Units (CR/NC Option) (CAN# BIOL 12) (F/S)

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.

PHY 1L  PHYSIOLOGY LAB - 1 Unit (L)

Prerequisite: A grade of C or higher in PHY 1 (Lecture)
Class Hours: 54 lab total
This course is designed for students that have already taken a PHY 1 course without the lab. Students wishing to take this course must have written approval from the Division Dean. A total of 16 individual laboratory experiments which provide a reinforcement of the topics covered in Physiology lecture. Selected experiments include: membrane transport, enzyme characteristics, electrophoresis, human genetics, muscle contraction, EEG, cardiology, hemodynamics, and metabolism. Group activities, mini-lectures, and demonstrations will be part of each lab session.

PHY 5  HUMAN SEXUALITY - 3 Units (CR/NC Option) (F/S)

Note: Will not count toward fulfillment of general education transfer requirements in science. It will, however, count toward completion of Category "E" requirements for CSU system. Will meet science requirement for AA degree.
Class Hours: 36 lecture/18 discussion 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 sexual disease, disorders, variations, myths and laws governing sexual practices will also be covered. This course may be offered in a distance learning format.
POLITICAL SCIENCE (POLS)

POLS 1  INTRODUCTION TO POLITICAL SCIENCE - 3 Units (CR/NC Option) (F/S)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
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.

POLS 2  INTRODUCTION TO AMERICAN GOVERNMENT - 3 Units (CAN# GOVT 2) (F/S)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course 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. It satisfies State of California requirements in U.S. Constitution and California state and local government. This course may be offered in a distance learning format.

POLS 12  CALIFORNIA STATE AND LOCAL GOVERNMENT – 3 Units (I)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
The purpose of this course is to acquaint the student with an understanding of how the State of California is governed. Emphasis will be placed on the local elections, political parties, legislative, executive, and judicial powers, special interest groups, lobbying, and campaign finances. Major events in the historical development of California and on present day issues will be examined in the context of the US and California state constitutions.

POLS 20  POLITICS OF THIRD WORLD NATIONS - 3 Units (CR/NC Option) (I)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 7
Class Hours: 54 lecture total
This course focuses on the political dynamics of selected third world 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 third world societies will also be examined.

POLS 25  GLOBAL POLITICS - 3 Units (I)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher; and a grade of C or higher in POLS 2
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The purpose of this course is to acquaint the student with an understanding of 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 examined. Major events of the last two centuries and present day issues will be examined in the context of a global system of international relations. This course may be offered in a distance learning format.

PSYCHOLOGY (PSYC)

PSYC 1A  GENERAL PSYCHOLOGY - 3 Units (CAN# PSY 2) (F/S)
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
PSYC 1A is the basic introductory course for the study of psychology as a science and as a profession. It provides both a general survey and intensive introduction to these concepts and elementary principles which are unique to psychology. Topics include perception, learning, development, motivation, personality, abnormal behavior, and biological and social bases of behavior. This course may be offered in a distance learning format.

PSYC 14  UNDERSTANDING HUMAN BEHAVIOR - 3 Units (F/S)
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This introductory psychology course provides a general survey of psychological concepts, theories, methods, and applications. Topics include learning, development, motivation, emotions, personality, abnormal behavior, psychotherapy, stress and coping, gender and sexuality, relationships, communication, and biological and social bases of behavior. This course may be offered in a distance learning format.

PSYC 15  SOCIAL PSYCHOLOGY - 3 Units (CR/NC Option) (F/S)
Advisory: A grade of C or higher in PSYC 1A and/or a grade of C or higher in SOC 1; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is a study of human interaction. The focus is on the individual within the social context. Topics such as attitude formation, conformity, obedience to authority, liking and loving, gender, age, and cultural diversity, prejudices, discrimination and stereotyping, pro-social behavior and altruism, aggression, power and leadership, groupthink and deindividuation, conflict resolution and peacemaking are explored. In addition, the research methods and theories used by social psychologists are discussed. Equipment and skills to access the Internet will be useful. This course may be offered in a distance learning format.

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PSYC 16 HEALTH PSYCHOLOGY - 3 Units (CR/NC Option) (I)
Advisory: A grade of C or higher in PSYC 1A; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the scientific and professional contributions made by the field of psychology in 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 including both wellness and illness; understanding the roles of patients and health care providers; and to the improvement of health care systems and health policy formation. Individual characteristics such as gender, culture, lifestyle, personality, and relationships and their affects on health are explored. Students who are pursuing psychology, health care, and/or human services as their profession will find this course beneficial. Skills to access the Internet will be helpful. This course may be offered in a distance learning format.

PSYC 17 ABNORMAL PSYCHOLOGY - 3 Units (CR/NC Option) (I)
Advisory: A grade of C or higher in PSYC 1A; and a grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides a historical overview of the field of abnormal psychology with an emphasis on current theories and paradigms. Abnormality is defined and behaviors that are considered abnormal or maladaptive are described. Assessment, diagnostic, classification, and prevention techniques, as well as psychological and biological therapies are explored. This course may be offered in a distance learning format.

PSYC 20 CROSS-CULTURAL PSYCHOLOGY - 3 Units (CR/NC Option) (F/S)
Advisory: A grade of C or higher in PSYC 1A; and a grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introduction to theories and research findings regarding cultural influences on human behavior and cognitive processes, including but not limited to: 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 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 learning format.

PSYC 41 CULTURAL/SOCIAL CONTEXT OF CHILDHOOD - 3 Units (F/S)
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the impact of the psychological, social, and cultural context of child development. Emphasis is given to the socialization process and to the cultural influences including ethnic identity, family relations, socioeconomic status, gender roles, peers, faith, and communities. Significant references highlight the experiences of children and their families from at least four different historically under-represented groups. This course may be offered in a distance learning format.

PSYC 46 HUMAN MEMORY AND LEARNING - 3 Units (CR/NC Option) (I)
Advisory: A grade of C or better in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total
This course will explore how the mind/brain stores and retrieves information. Core concepts of modern research and theorizing about human memory and cognition will be reviewed. Research on the application of memory and learning principles to memory and learning improvement will be investigated. Students will learn to evaluate the role of attention, prior learning, cognitive style, personality functioning and motivation in memory encoding and retrieval. Changes in memory processes through the lifespan will be examined including recent research on topics such as Alzheimer’s and amnesia.

PUBLIC SAFETY (PUBS)

PUBS 158 SCHOOL BUS DRIVER TRAINING (formerly EDUC 158) - 2 Units (CR/NC Option)
Class Hours: 36 lecture total
The purpose of this course is to acquaint students with all of the laws, regulations, and operational procedures involved in becoming a licensed school bus driver in California. This course meets a state mandated classroom training requirement which a student must complete prior to taking highway patrol tests and doing behind-the-wheel training. This course does not include individual behind-the-wheel training, but will acquaint the student with laws and procedures pertaining to the correct operation of a school bus.

PUBS 159 SCHOOL BUS DRIVER TRAINING REFRESHER (formerly EDUC 363) - .5 Unit (CR/NC Option)
Class Hours: 10 lecture total
This course is a brief overview of all the areas of bus driver licensing, school bus operation use and regulations, defensive driving, and student loading and unloading procedures.
### REAL ESTATE (REAL)

**REAL 30**  
**REAL ESTATE PRINCIPLES (formerly BUSI 30)** - 3 Units  
(A/F/S)  
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher  
Class Hours: 54 lecture total  
The fundamental real estate course covering the basic laws and principles of California Real Estate gives understanding, background, and terminology necessary for advanced study in specialized courses. Designed to assist those in preparing for the real estate salesperson license examination. Either this course or possession of a real estate license is prerequisite to most other real estate courses. Required for Real Estate majors and in the Real Estate Certificate Program.

**REAL 31**  
**REAL ESTATE PRACTICE (formerly BUSI 31)** - 3 Units  
(A/F/S)  
Class Hours: 54 lecture total  
Day-to-day operations of the real estate broker and agent; prospecting, financing, escrow, and ethics. Applies toward California Department of Real Estate educational requirements for agents continuing education and brokers examination. Required for real estate majors and Real Estate Certificate Program. Offered primarily as an evening class.

**REAL 32**  
**REAL ESTATE APPRAISAL (formerly BUSI 32)** - 3 Units  
(CR/NC Option)  
(F)  
Advisory: A grade of C or higher in REAL 30 or have a real estate license  
Class Hours: 54 lecture total  
(when offered in the Distance Education format, hours will total 162)  
This course will familiarize the student with the basic principles of real estate appraisal and the application of those principles to the market, cost, and income approaches to the valuation of real property. The main emphasis of this course is on the appraisal of single family residences. However, the student will receive introductory information as to the appraisal of income-producing properties. This course applies toward California Department of Real Estate educational requirements for the broker's and salesperson's licenses, the Certification Program for Real Estate majors, and the educational requirements under the state-mandated appraisal licensing (OREA). This course is offered primarily as an evening class. This course may be offered in a distance learning format.

**REAL 33**  
**LEGAL ASPECTS OF REAL ESTATE (formerly BUSI 33)** - 3 Units  
(I)  
Advisory: A grade of C or higher in REAL 30 or have a real estate license  
Class Hours: 54 lecture total  
A study of California real estate law, including rights incident to property ownership and management, agency, contracts, and application to real estate transfer, conveyancing, trust deed and foreclosure as well as recent legislation governing real estate transactions, environmental regulations and conduct.

**REAL 34**  
**REAL ESTATE FINANCE (formerly BUSI 34)** - 3 Units  
(CR/NC Option)  
(S)  
Advisory: A grade of C or higher in REAL 30 or have a real estate license  
Class Hours: 54 lecture total  
Analysis of Real Estate financing, including lending policies and problems in financing transactions in residential, apartment, commercial, and special-purpose properties. This course will introduce the basic everyday problems encountered in the mortgage banking field in relation to simple real estate transactions. It will also offer solutions to those problems in terms of everyday language to the agent or the buyer and seller of real estate. It is a practical approach to real estate finance. Offered primarily in the evening program. Applies toward California Department of Real Estate educational requirements for the broker's examination.

**REAL 135**  
**REAL ESTATE ECONOMICS (formerly BUSI 135)** - 3 Units  
(I)  
Class Hours: 54 lecture total  
A study of the interrelationship between economics and real estate. The course includes a review of basic economic principles; a study of real estate markets; a look at the influences involving real estate development; and, perhaps most important, a study of the economics of real estate investment. Offered in evening program only.

**REAL 136**  
**INTRODUCTION TO ESCROW (formerly BUSI 136)** - 3 Units  
(I)  
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher. A grade of C or higher in REAL 30  
Class Hours: 54 lecture total  
Case method presentation in escrow procedures including processing sale, loan, exchange and business escrows. Includes review and preparation of documents, processing and closing escrows, prorations, title search, title reports and all details appurtenant to efficient escrow processing. Offered primarily as an evening course.

**REAL 138**  
**ADVANCED REAL ESTATE APPRAISAL (formerly BUSI 138)** - 3 Units  
(CR/NC Option)  
(I)  
Advisory: A grade of C or higher in REAL 32  
Class Hours: 54 lecture total  
This course will reinforce the basic principles of real estate appraisal and their application to the three approaches to valuation of real property. The main emphasis of this course is on the income approach to value along with the support of the market and cost approaches, as all three approaches apply to income-producing property, such as multi-family, commercial, industrial, and any other special purpose-type properties. This course applies toward California Department of Real Estate educational requirements for the broker's and salesperson's licenses, the Certification Program for Real Estate majors, and the educational requirements under the state-mandated appraisal licensing (OREA). This course is offered primarily as an evening class.

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REGN 1  
THEORETICAL FOUNDATIONS OF NURSING CARE (formerly REGN 60) – 7 Units (F/S)

Limitation on Enrollment: Students must be enrolled in the nursing program
Corequisite: Students must be concurrently enrolled in REGN 2
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: 126 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 medical-surgical 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 (formerly REGN 61) – 5 Units (F/S)

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 drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 270 clinical total

The first clinical course leading to Registered Nursing licensure finds the student building a safe foundation for nursing care with basic nursing skill demonstration in the Clinical Skills Laboratory. Successful completion of basic nursing skills as vital signs, bathing, skin care, mobility, and bowel care are then applied to patient care in the hospital setting. The Clinical Skills Laboratory is utilized continuously throughout the course for more complex fundamental skills as medication preparation and administration, urinary catheterization, and sterile technique. Application of the theory presented in the 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.

REGN 10  
THEORETICAL CONCEPTS OF MEDICAL SURGICAL NURSING I (formerly REGN 70) – 7 Units (F)

Prerequisite: A grade of C or higher in each of the following courses: REGN 1 and REGN 2
Corequisite: Students must be concurrently enrolled in REGN 11 and REGN 12
Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 126 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 (formerly REGN 71) – 4.5 Units (F/S)

Prerequisite: A grade of C or higher in each of the following courses: REGN 1 and REGN 2
Corequisite: Students must be concurrently enrolled in REGN 10 and REGN 12
Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 243 clinical total

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 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 the fundamental clinical nursing skills they mastered. Students will have a variety of patient assignments on the medical, surgical, neurology, and orthopedic floors with special assignments in oncology, operating room, pre-anesthesia surgical suite, emergency room, gastroenterology lab, and respiratory therapy. Clinical skills will include 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 two 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, chart review, and clinical conferences.
REGN 12  ASSESSMENT CONCEPTS OF MEDICAL SURGICAL NURSING (formerly REGN 72) - .5 Units (F/S)
Prerequisite: A grade of C or higher in each of the following courses: REGN 1 and REGN 2
Corequisite: Students must be concurrently enrolled in REGN 20 and REGN 21
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: 27 lab total
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 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 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 using 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.

REGN 20  THEORETICAL CONCEPTS OF FAMILY/MATERNAL-CHILD NURSING AND MEDICAL SURGICAL NURSING II (formerly REGN 90) – 7 Units (F/S)
Prerequisite: A grade of C or higher in each of the following courses: REGN 10, REGN 11 and REGN 12
Corequisite: Students must be concurrently enrolled in REGN 21
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: 126 lecture total
REGN 20 is a required course for the Associate Degree Nursing program at Shasta College and a required prerequisite for REGN 30, REGN 31 and REGN 32. 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 FAMILY/MATERNAL-CHILD NURSING AND MEDICAL SURGICAL NURSING II (NON-DEGREE) (formerly REGN 90x/REGN 91X) – 4 Units (F/S)
Corequisite: Students must be concurrently enrolled in REGN 21X
Limitation on Enrollment: Students must be enrolled in the 30-unit option program
Note: This is the course for the non-degree, 30-unit option student. If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 72 lecture total
REGN 20X is designed for the Licensed Vocational Nurse enrolled in the 30-unit non-degree program. It is a required prerequisite course for REGN 30X, REGN 31X and REGN 32X. This course is one of two corequisite courses that make up the 30-unit option program. The students will expand their knowledge of medical surgical nursing and examine complications in obstetrical and pediatric nursing. Concepts emphasized include family, communication, health promotion, illness prevention, teaching, cultural sensitivity, growth and development, nursing process, critical thinking, legal-ethical issues and advocacy.

REGN 21  CLINICAL CONCEPTS OF FAMILY/MATERNAL-CHILD AND MEDICAL SURGICAL NURSING II (formerly REGN 91) – 5 Units (F/S)
Prerequisite: A grade of C or higher in each of the following courses: REGN 10, REGN 11 and REGN 12
Corequisite: Students must be concurrently enrolled in REGN 20
Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 270 clinical total
REGN 21 is a required course for the Associate Degree Nursing program at Shasta College and a required prerequisite for REGN 30, REGN 31 and REGN 32. 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, venipuncture, 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.

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.
Subject to change. Check the current class schedule.
REGN 21X  CLINICAL CONCEPTS OF FAMILY/MATERNAL-CHILD AND MEDICAL SURGICAL NURSING II (NON-DEGREE) (formerly REGN 90X/REGN 91X) – 4 Units

Corequisite: Students must be concurrently enrolled in REGN 20X
Limitation on Enrollment: Students must be enrolled in the 30-unit option program
Note: This is the course for the non-degree, 30-unit option student. If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 216 clinical 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 30-unit option program. The students will expand the fundamental 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 30  CONCEPTS OF MENTAL HEALTH AND COMMUNITY-BASED NURSING (formerly REGN 80) – 4 Units (F/S)

Prerequisites: A grade of C or higher in each of the following courses: REGN 20 and REGN 21
Corequisite: Students must be concurrently enrolled in REGN 31 and REGN 32
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: 72 lecture
REGN 30 is a required course for the Associate Degree Nursing Program at Shasta College and one of three corequisite courses that comprise the fourth semester of the Associate Degree Nursing Program. The nursing process and critical thinking skills are emphasized. Students use the nursing process and critical thinking to plan, implement, and evaluate the patient in mental health and community based settings. The emphasis of this course is fundamentals of mental health, community health nursing, the 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. 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 30X  CONCEPTS OF MENTAL HEALTH AND COMMUNITY-BASED NURSING (NON-DEGREE) (formerly REGN 80X/REGN 81X) – 4 Units (F/S)

Prerequisite: A grade of C or higher in each of the following courses: REGN 20X and REGN 21X
Corequisite: Students must be concurrently enrolled in REGN 31X and REGN 32X
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. All students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 72 lecture total
REGN 30X is designed for the licensed vocational nurse enrolled in the 30-unit option non-degree program. This is one of three corequisite courses that comprise the fourth semester of the Associate Degree Nursing Program. The nursing process and critical thinking skills are emphasized. Students use the nursing process and critical thinking to plan, implement, and evaluate the patient in mental health and community based settings. The emphasis of this course is fundamentals of mental health, community health nursing, the 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. 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 31  THEORETICAL CONCEPTS OF MEDICAL SURGICAL NURSING III (formerly REGN 81) – 4 Units (F/S)

Prerequisites: A grade of C or higher in each of the following courses: REGN 20 and REGN 21
Corequisite: Students must be concurrently enrolled in REGN 30 and REGN 32
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: 72 lecture
REGN 31 is one of the final required courses for the Associate Degree Nursing Program at Shasta College and one of three corequisite courses that comprise the fourth semester of the Associate Degree Nursing Program. The course provides the conceptual basis of nursing care for high acuity medical surgical patients. Students use the nursing process and critical thinking to plan, implement, and evaluate the acute and rehabilitative care of complex medical surgical patients. The course focus is on complex medical surgical conditions, the 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. 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 32  CLINICAL CONCEPTS OF THE CONTINUUM OF ADULT HEALTHCARE (formerly REGN 82) – 4 Units (F/S)
Prerequisites: A grade of C or higher in each of the following courses: REGN 20 and REGN 21
Corequisite: Students must be concurrently enrolled in REGN 30 and REGN 31
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: 216 clinical total
REGN 32 is a required course for the Associate Degree Nursing program at Shasta College and one of three corequisite 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.

REGN 32X  CLINICAL CONCEPTS OF THE CONTINUUM OF ADULT HEALTHCARE (NON-DEGREE) (formerly REGN 20X/REGN 81X) – 4 Units (F/S)
Prerequisite: A grade of C or higher in each of the following courses: REGN 20X and REGN 21X
Corequisite: Students must be concurrently enrolled in REGN 30X and REGN 31X
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. 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 32X is designed for the licensed vocational nurse enrolled in the 30-unit non-degree program. It is one of three corequisite courses that comprise the final semester of the 30-unit option Program. Building upon the content of REGN 20X and 21X students expand previously learned clinical nursing skills to become increasingly independent.

REGN 60  THEORETICAL FOUNDATIONS OF NURSING CARE – 6 Units (F/S)  (Last semester offered is Spring 2006)
Limitation on Enrollment: Students must be enrolled in the nursing program
Corequisite: Students must be concurrently enrolled in REGN 61
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: 108 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 medical-surgical nursing, which are demonstrated in the corequisite clinical course, REGN 61 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 61  CLINICAL FOUNDATIONS OF NURSING CARE – 6 Units (F/S)  (Last semester offered is Spring 2006)
Limitation on Enrollment: Students must be enrolled in the nursing program
Corequisite: Students must be concurrently enrolled in REGN 60
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: 324 clinical total
The first clinical course leading to Registered Nursing licensure finds the student building a safe foundation for nursing care with basic nursing skill demonstration in the Clinical Skills Laboratory. Successful completion of basic nursing skills as vital signs, bathing, skin care, mobility, and bowel care are then applied to patient care in the hospital setting. The Clinical Skills Laboratory is utilized continuously throughout the course for more complex fundamental skills as medication preparation and administration, urinary catheterization, and sterile technique. Application of the theory presented in the corequisite course, REGN 60 Theoretical Foundations of Nursing Care, finds the student caring for adult and elderly adult medical-surgical patients in the acute care setting. The student organizes nursing care through the nursing process; demonstrates effective communication; and maximizes opportunities for patient education.

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Subject to change. Check the current class schedule.
REGN 80  THEORETICAL CONCEPTS OF MEDICAL-SURGICAL NURSING – 7 Units (F)  
(Last semester offered is Fall 2006)

Prerequisite: A grade of C or higher in each of the following courses: REGN 60 and REGN 61
Corequisite: Students must be concurrently enrolled in REGN 70 and REGN 72
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: 126 lecture total
REGN 70 is a required prerequisite for REGN 80 and REGN 81. REGN 70 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 60 and REGN 61, the students will expand their knowledge of medical-surgical nursing. Foundational information regarding disease process, etiology, pathophysiology, and clinical manifestations begins 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 71  CLINICAL CONCEPTS OF MEDICAL-SURGICAL NURSING - 4.5 Units (F/S)  
(Last semester offered is Fall 2006)

Prerequisite: A grade of C or higher in each of the following courses: REGN 60 and REGN 61
Corequisite: Students must be concurrently enrolled in REGN 70 and REGN 72
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
REGN 71 is a required prerequisite for REGN 80 and REGN 81. REGN 71 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 60 and REGN 61, the students will expand the fundamental clinical nursing skills they mastered. Students will have a variety of patient assignments on the medical, surgical, neurology, and orthopedic floors with special assignments in oncology, operating room, pre-anesthesia surgical suite, and respiratory therapy. Clinical skills will include receiving report, organizing their patient care, assessments, documentation, medication administration, intravenous therapy, blood administration, TPN/Lipid administration, accuchecks, and analyzing daily labs. 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 organizational tools, clinical papers, a nursing care plan, chart review, and clinical conferences.

REGN 72  ASSESSMENT CONCEPTS OF MEDICAL-SURGICAL NURSING - .5 Units (F/S)  
(Last semester offered is Fall 2006)

Prerequisite: A grade of C or higher in each of the following courses: REGN 60 and REGN 61
Corequisite: Students must be concurrently enrolled in REGN 70 and REGN 71
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: 27 lab total
REGN 72 is a required prerequisite for REGN 80 and REGN 81 and 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 Association Degree Nursing program. Building upon the content of REGN 60 and REGN 61, 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 using probing questions to explore key areas in more depth. Objective assessment skills include inspection, auscultation, percussion, and palpation, and the use of specialized equipment. One key focus is how to individualize assessments based upon patient diagnosis and significant patient data.

REGN 79  LVN – RN TRANSITION – 2 Units (I)

Limitation on Enrollment: Current CA Licensed Vocational Nurse

Class Hours: 36 lecture total
This course is designed for the LVN transitioning into the role of the registered nurse. Skills and theory necessary for entering third semester of the Associate Degree Nursing Program are taught and evaluated.

REGN 80  CONCEPTS OF MENTAL HEALTH AND COMMUNITY-BASED NURSING – 4 Units (F/S)  
(Last semester offered is Spring 2007)

Prerequisite: A grade of C or higher in each of the following courses: REGN 70, REGN 71, and REGN 72
Corequisite: Students must be concurrently enrolled in REGN 81 and REGN 82
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: 72 total
REGN 80 is a required prerequisite for REGN 90 and REGN 91. REGN 80 is a required course for the Associate Degree Nursing Program at Shasta College. This course is one of three Corequisite courses that comprise the third semester of the Associate Degree Nursing Program. The emphasis of this course is fundamentals of mental health and community health nursing. The nursing process and critical thinking skills are emphasized.
REGN 80X  CONCEPTS OF MENTAL HEALTH AND COMMUNITY-BASED NURSING (NON-DEGREE) – 6 Units (F/S)  
(Last semester offered is Spring 2007)  
Limitation on Enrollment: Students must be enrolled in the 30 unit option program  
Corequisite: Students must be concurrently enrolled in REGN 81X  
Note: This is the course for the non-degree, 30-unit option student. 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: 63 lecture/135 clinical total  
REGN 80X is designed for the licensed vocational nurse enrolled in the 30-unit option non-degree program. The course focuses on fundamentals of mental health, psychiatric, and community health nursing. The nursing process and critical thinking skills are emphasized with concurrent clinical practice in inpatient, outpatient, home care, and community agencies.  

REGN 81  THEORETICAL CONCEPTS OF MEDICAL-SURGICAL NURSING II – 4 Units (F/S)  
(Last semester offered is Spring 2007)  
Prerequisites: A grade of C or higher in each of the following courses: REGN 70, REGN 71, and REGN 72  
Corequisite: Students must be concurrently enrolled in REGN 80 and REGN 82  
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: 72 lecture  
REGN 81 is a required prerequisite for REGN 90 and REGN 91. REGN 81 is a required course for the Associate Degree Nursing Program at Shasta College. This course is one of three corequisite courses that comprise the third semester of the Associate Degree Nursing Program. The course provides the conceptual basis of nursing care for high acuity medical surgical patients. Students use the nursing process and critical thinking to plan, implement, and evaluate the acute and rehabilitative care of complex medical surgical patients.  

REGN 81X  CONCEPTS OF ADVANCED MEDICAL-SURGICAL NURSING (NON DEGREE) – 6 Units (F/S)  
(Last semester offered is Spring 2007)  
Limitation on Enrollment: Students must be enrolled in the 30 unit option program  
Corequisite: Students must be concurrently enrolled in REGN 80X  
Note: This is the course for the non-degree, 30-unit option student. 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: 83 lecture/135 clinical total  
REGN 81X is designed for the licensed vocational nurse enrolled in the 30 unit option non-degree program. This course provides the conceptual basis and concurrent clinical practice of nursing care for complex medical-surgical patients. Students use the nursing process and critical thinking to plan, implement, and evaluate the acute, remedial, and rehabilitative care of the complex medical-surgical patient.  

REGN 82  CLINICAL CONCEPTS OF THE CONTINUUM OF ADULT HEALTHCARE – 4 Units (F/S)  
(Last semester offered is Spring 2007)  
Prerequisites: A grade of C or higher in each of the following courses: REGN 70, REGN 71, and REGN 72  
Corequisite: Students must be concurrently enrolled in REGN 80 and REGN 81  
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: 216 clinical total  
REGN 82 is a required prerequisite for REGN 90 and REGN 91. REGN 82 is a required course for the Associate Degree Nursing program at Shasta College. This course is one of three co-requisite courses that comprise the third semester of the Associate Degree Nursing Program. Building upon the content of REGN 70, 71, and 72, the student will expand the clinical nursing skills they mastered. Students will have a variety of patient assignments in the following areas: acute care, critical care, rehabilitation, mental health, and community health. Emphasis is placed on the integration of theory and the nursing process in the clinical setting by the use of clinical papers and nursing care plans.  

REGN 90  THEORETICAL AND CLINICAL CONCEPTS OF FAMILY AND MATERNAL-CHILD NURSING – 6 Units (F/S)  
(Last semester offered is Fall 2007)  
Prerequisites: A grade of C or higher in each of the following courses: REGN 80, REGN 81 and REGN 82  
Corequisite: Students must be concurrently enrolled in REGN 91  
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 lecture/162 clinical total  
REGN 90 is one of final two required courses for the Associate Degree Nursing program at Shasta College. The role of the Registered Nurse in the care of the childbearing and child-rearing family is examined. Concepts emphasized include family, communication, health promotion, teaching, cultural variety, growth and development, nursing process, critical thinking, legal-ethical issues and advocacy. The student will care for families in a variety of acute care and community-based settings.  

"F" and "S" indicate semester course is usually offered. "I" indicates course may not be offered every year.  
Subject to change. Check the current class schedule.
REGN 90X  SELECT THEORETICAL AND CLINICAL CONCEPTS OF FAMILY AND MATERNAL-CHILD NURSING (NON-DEGREE) – 2 Units (F/S)  (Last semester offered is Fall 2007)

Prerequisites:  A grade of C or higher in each of the following courses: REGN 80X and REGN 81X
Corequisite:  Students must be concurrently enrolled in REGN 91X
Note:  This is the course for the non-degree, 30-unit option student.  If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities.  Students are financially responsible for meeting these requirements according to the established program process.
Class Hours:  27 lecture/27 clinical total
REGN 90X is designed for the Licensed Vocational Nurse enrolled in the 30-unit option non-degree program.  The course emphasis is on the preventative, supportive, and teaching aspects for patients in advanced family systems.  The nursing process and critical thinking skills are emphasized with concurrent clinical practice.

REGN 91  THEORETICAL AND CLINICAL CONCEPTS OF MANAGEMENT & MEDICAL SURGICAL NURSING III – 6 Units (F/S)  (Last semester offered is Fall 2007)

Prerequisites:  A grade of C or higher in each of the following courses: REGN 80, REGN 81 and REGN 82
Corequisite:  Students must be concurrently enrolled in REGN 90
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 lecture/162 clinical total
REGN 91 is one of the final required courses for the Associate Degree Nursing Program at Shasta College.  This course is one of two corequisite courses that make up the fourth semester of the Associate Degree Nursing Program.  The course focus is selected complex medical/surgical conditions and the fundamental concepts of leadership and management in nursing theory and clinical practice.  This course will provide the conceptual basis and concurrent clinical practice of nursing care for selected complex medical surgical patients.  The students use the nursing process and critical thinking to plan, implement, and evaluate the acute, remedial, and rehabilitative care of the complex medical surgical patient.  The student will also progress through several areas of inquiry focusing on leadership, management, current nursing trends, legal/ethical issues in nursing practice and successful preparation and completion of the licensing examination and personal career development.  Critical thinking skills are emphasized with concurrent clinical practice.  Students will be provided with clinical experiences designed to focus on the nursing leadership and management roles in a variety of healthcare settings.

REGN 91X  THEORETICAL AND CLINICAL CONCEPTS OF MANAGEMENT & MEDICAL SURGICAL NURSING III (NON-DEGREE) – 6 Units (Last semester offered is Fall 2007)

Prerequisites:  A grade of C or higher in each of the following courses: REGN 80X and REGN 81X
Corequisite:  Students must be concurrently enrolled in REGN 90X
Note:  This is the course for the non-degree, 30-unit option student.  If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities.  Students are financially responsible for meeting these requirements according to the established program process.
Class Hours:  54 lecture/162 clinical total
REGN 91X is designed for the Licensed Vocational Nurse enrolled in the 30-unit option non-degree program.  The course focus is leadership and management in nursing practice.  A focus is also given to current issues and trends, and the role of the professional nurse in practice.  Critical thinking skills are emphasized with concurrent clinical practice.

RUSSIAN  (RUSS)

Two years of high school foreign language with grades of “C” or better is equivalent to one semester of foreign language at Shasta College.

RUSS 1  ELEMENTARY RUSSIAN - 5 Units (I)
Class Hours:  90 lecture total
This course is designed to give the student training in pronunciation, essentials of grammar, reading, writing and speaking in Russian.  The student is also introduced to the customs and culture of the Russian people.

RUSS 2  ELEMENTARY RUSSIAN - 5 Units (I)
Prerequisite:  A grade of C or higher in RUSS 1, or Foreign Language Placement Level 2 or higher
Class Hours:  90 lecture total
This course is a continuation of RUSS 1.  There is a continued emphasis on listening to and reading Russian (the receptive skills) and on speaking and writing Russian.  Students expand their language skills and vocabulary.  Also students improve the ability to ask and answer questions and to discuss daily life, current events, travel, and leisure time activities.  In the process of learning the language, the student is introduced to the culture and people of Russia, its history, literature, art, architecture, music and ballet.

RUSS 3  INTERMEDIATE RUSSIAN - 5 Units (I)
Prerequisite:  A grade of C or higher in RUSS 2 or Foreign Language Placement Level 3 or higher
Class Hours:  90 lecture total
Designed for those who have had previous training in the Russian language.  Review of grammar and sentence patterns with increased emphasis on speaking and useful patterns of the language.  Students will read excerpts from works of Russian authors, study the culture of Russian speaking people, produce translations of various selections and develop their own writing skills.
SIGN LANGUAGE (SL)
Two years of high school foreign language with grades of "C" or better is equivalent to one semester of foreign language at Shasta College.

SL 80  DEAF CHALLENGES - 3 Units (I)
Class Hours: 54 lecture total
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.

SL 81  EDUCATIONAL WORLD OF THE DEAF - 3 Units (I)
Class Hours: 54 lecture total
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.

SL 90  AMERICAN SIGN LANGUAGE I (formerly SPED 93A) - 4 Units (CR/NC Option) (F/S)
Advisory: Concurrent enrollment in SL 91
Class Hours: 72 lecture total
Designed to introduce student to basic skills in American Sign Language vocabulary, fingerspelling 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.

SL 91  AMERICAN SIGN LANGUAGE I SKILL BUILDING LAB (formerly SPED 95A) - 1 Unit (F/S) (CR/NC Option)
Corequisite: Student must be concurrently enrolled in, or have completed SL 90 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 basic American Sign Language skills. The course will review vocabulary, sentence structure and visual, non-manual behaviors from SL 90 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. Approximately 75% of class time will be non-verbal interactions. Note: This class may be repeated one time for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

SL 92  AMERICAN SIGN LANGUAGE II (formerly SPED 93B) - 4 Units (F/S) (CR/NC Option)
Prerequisite: A grade of C or higher in SL 90
Class Hours: 72 lecture total
This course is a continuation of American Sign Language I. Designed for the student desiring to increase vocabulary and fluency in performing and receiving American Sign Language information. 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 dialogue 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.

SL 93  AMERICAN SIGN LANGUAGE II SKILL BUILDING LAB (formerly SPED 95D) - 1 Unit (F/S) (CR/NC Option)
Corequisite: Students must be concurrently enrolled in, or have completed SL 92 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 structure learned in SL 92. American Sign Language II, and will review vocabulary, sentence structure and visual, non-manual behaviors learned from SL 92. 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 SL 94. Note: No verbal communication allowed in lab. This course may be taken up to two times for a total of two enrollments since skills and proficiencies are enhanced by supervised repetition and practice.

SL 94  AMERICAN SIGN LANGUAGE III (formerly SPED 93C) - 4 Units (CR/NC Option) (I)
Prerequisite: A grade of C or higher in SL 92 and a grade of C or higher in SL 93
Class Hours: 72 lecture 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 Code of Ethics, expectations, and simultaneous interpreting practice. Exposure to Deaf culture through class discussions and guest lecturers will be incorporated.

*F* and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year. Subject to change. Check the current class schedule.
SL 96  AMERICAN SIGN LANGUAGE IV- 4 Units (CR/NC Option) (S/I)
Prerequisite: A grade of C or higher in SL 94
Class Hours: 72 lecture 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 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 of the Deaf community.

SOCILOGY  (SOC)

SOC 1  INTRODUCTION TO SOCIOLOGY - 3 Units (CAN# SOC 2) (CR/NC Option) (F/S)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total  (when offered in the Distance Education format, hours will total 162)
This course is designed to introduce the beginning student through discussion and lectures, to the basic terminology, concepts and methods necessary for a sociological analysis of social behavior in a group or social context. The course is an introductory course, thus, it deals with breadth, not depth. The major elements of sociological analysis surveyed are culture, society, social groups, socialization, social stratification, social change, collective behavior, deviance, symbolic communication and alienation. This course may be offered in a distance learning format.

SOC 2  SOCIAL PROBLEMS - 3 Units (CAN# SOC 4) (CR/NC Option) (F/S)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total  (when offered in the Distance Education format, hours will total 162)
The course involves the student in the formal sociological analysis of some of the major problems of life - crime, delinquency, drug addiction, race relations, etc. Each semester the course emphasizes an investigation of the expression of a problem of consequence to both the nation and local community. This course may be offered in a distance learning format.

SOC 15  SOCIOLOGY OF MASS MEDIA - 3 Units (CR/NC Option) (F/S)
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 6 or higher
Class Hours: 54 lecture total  (when offered in the Distance Education format, hours will total 162)
The investigation and examination of the movies, television and radio, popular music, newspapers, magazines, and popular reading which have affected our values, or which allow for search toward values. This course may be offered in a distance learning format.

SOC 22  SOCIOLOGY OF AGING - 3 Units (CR/NC Option) (I)
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
This course presents social, economic, and political factors as they relate to the aged population. Topics include demographics, cross-cultural perspectives the horizon of the future, resources for the elderly, and social support systems. Adaptation to changing family and social roles will be covered in the context of societal issues.

SOC 25  SOCIOLOGY OF MINORITIES - 3 Units (CR/NC Option) (F/S)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total  (when offered in the Distance Education format, hours will total 162)
A survey course designed to introduce the student to identification and sociological analysis of present-day racial minority groups in the United States. This course may be offered in a distance learning format.

SOC 70  SOCIAL WELFARE - 3 Units (CR/NC Option) (F/S)
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
This course introduces the beginning student to various fields of social welfare and social work. The class will focus on current and historical perspectives on the effects of social problems such as poverty, emotional difficulties, sexism, crime, racism, and child abuse. Through discussions, lectures and guest speakers, students will be introduced to basic terminology, methods, and concepts necessary to understand the profession of social work.

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 (CR/NC Option) (CAN # SPAN 2) (SPAN SEQ A) (F/S)
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5
Class Hours: 90 lecture total
This introductory course is designed to give the student thorough and intense practice in speaking and listening to Spanish, and reading and writing in Spanish, with special emphasis on grammar and pronunciation. The course will focus on communicative competence in situations relating to daily routines, home life, college life, and everyday activities such as meeting and describing people; finding out about schedules, directions, and locations; discussing weather, eating, and holidays. Students are introduced to the culture of Spanish-speaking people in general and to specific customs and cultural characteristics of various Spanish-speaking countries.
SPAN 2  ELEMENTARY SPANISH - 5 Units (CR/NC Option)  (CAN # SPAN 4)  (SPAN SEQ A)  (F/S)
Prerequisite:  A grade of C or higher in SPAN 1, or Foreign Language Placement Level 2 or higher
Advisory:  A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours:  90 lecture total
This course is a continuation of SPAN 1.  There is continued emphasis on listening to and reading Spanish (receptive skills) and on speaking and writing Spanish.  Students expand their language skills and vocabulary.  Students also improve their ability to ask and answer questions and to discuss current events, health, food, travel, leisure time and activities, and shopping.  The course will focus on communicative competence in situations relating to the aforementioned areas and also to art, music, commerce, family, and the future.  Students learn to express themselves in Spanish regarding these topics as they relate to the culture of Spanish-speaking people in general and to some specific Spanish-speaking countries.

SPAN 3  INTERMEDIATE SPANISH - 3 Units (CAN# SPAN 8)  (SPAN SEQ B)  (CR/NC Option)  (F/S)
Prerequisite:  A grade of C or higher in SPAN 2, or Foreign Language Placement Level 3 or higher
Advisory:  A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours:  54 lecture total
This course is a continuation of SPAN 2.  SPAN 3 includes a compact, detailed review of first-year material as well as new vocabulary and expansion of first-year principles, development of more advanced communication and composition skills, and verb tenses and structures.  This course offers extensive conversational exercises with stress on correct pronunciation.  The course also includes an introduction to Spanish and Latin American literature and further discussion of the arts in general, particularly as they relate to the culture of the Spanish-speaking countries.

SPAN 4  INTERMEDIATE SPANISH - 3 Units  (CAN# SPAN 10)  (SPAN SEQ B)  (CR/NC Option)  (S)
Prerequisite:  A grade of C or higher in SPAN 3, or Foreign Language Placement Level 4
Advisory:  A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours:  54 lecture total
This course is a continuation of SPAN 3.  SPAN 4 (along with SPAN 3) comprises a compact, detailed review of first-year material as well as new vocabulary and expansion of first-year principles, development of more advanced communication and composition skills, and a more comprehensive overview of verb tenses and structures.  This course offers extensive conversational exercise with stress on correct pronunciation.  The course also includes further discussion of Spanish and Latin American literature and of the arts in general, particularly as they relate to the culture of Spanish-speaking countries.

SPAN 20  SPANISH CONVERSATION AND PHONOLOGY - 3 Units (CR/NC Option)  (S/I)
Prerequisite:  A grade of C or higher in SPAN 3, or Foreign Language Placement Level 4
Advisory:  A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours:  54 lecture total
Intense practice in the spoken language with the objective of perfecting speech patterns as well as the sound system and increasing vocabulary by giving oral presentations, conversing, and analyzing elementary Spanish phonology.

SPAN 151  INTRODUCTION TO SPANISH TERMINOLOGY - 3 Units (CR/NC Option)  (F/S)
Advisory:  A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours:  54 lecture total
This course will help those students who want to learn Spanish vocabulary and grammar in order to facilitate very basic communication in everyday workplace and social situations.  Students are introduced to pronunciation and minimum essentials of Spanish grammar.  This course is a survey of basic vocabulary, numbers (1-100), some terminology 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 197  SPECIAL TOPICS IN SPANISH - .5 - 3 Units (CR/NC Option)  (F/S/I)
Advisory:  A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours:  9-54 lecture total
This course is designed to meet the needs of professional personnel who work with Spanish-speaking clients.  Essentials of Spanish pronunciation and grammar are introduced, along with commands and the two past tenses.  Communicative skills will be emphasized through role-plays of realistic situations, practiced dialogues, and study of specialized vocabulary related to the profession.

SPECIAL EDUCATION  (SPED)
See ADAP

SPEECH  (SPCH)

SPCH 10  INTERPERSONAL COMMUNICATION - 3 Units  (CR/NC Option)  (CAN # SPCH 8)  (F/S)
Advisory:  A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours:  54 lecture total  (when offered in the Distance Education format, hours will total 162)
This course is an introduction to the process of human communication with emphasis on interpersonal communication.  Emphasis is placed on the psychological, social, cultural, and linguistic factors which affect normal person-to-person interactions.  Subjects covered are 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 learning format.

"F" and "S" indicate semester course is usually offered.  "I" indicates course may not be offered every year.
Subject to change.  Check the current class schedule.
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<tr>
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<tbody>
<tr>
<td>SPCH 10</td>
<td>ORAL INTERPRETATION - 3 Units (CR/NC Option)</td>
<td>3</td>
<td>CR/NC Option</td>
<td>F/S</td>
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<td></td>
<td>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.</td>
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<tr>
<td>SPCH 54</td>
<td>SMALL GROUP COMMUNICATION - 3 Units (CR/NC Option)</td>
<td>3</td>
<td>CR/NC Option</td>
<td>F/S</td>
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<td></td>
<td>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, critical thinking/problem-solving, managing conflict, and evaluation of group interaction. Students will be involved in group interactions and emphasis will be on practical experience. College level writing skills will be expected on all papers, outlines and short essays.</td>
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<tr>
<td>SPCH 60</td>
<td>PUBLIC SPEAKING - 3 Units (CAN#SPCH 4) (CR/NC Option)</td>
<td>3</td>
<td>CR/NC Option</td>
<td>F/S</td>
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<td></td>
<td>This course is an introduction to the process of human communication with emphasis on public speaking. Subjects covered are audience analysis, choosing speech topics, finding and using supporting materials, arranging and outlining related points, essentials of speech delivery and evaluation. College level writing skills will be expected on all papers, outlines and short essays.</td>
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<tr>
<td>SPCH 97</td>
<td>SPECIAL TOPICS IN SPEECH COMMUNICATION (formerly SPCH 91AD) - .5-2 Units (CR/NC Option)</td>
<td>.5-2</td>
<td>CR/NC Option</td>
<td>F/S</td>
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<td></td>
<td>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 presentation technology. College level writing skills will be expected on all papers, outlines, and short essays.</td>
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**STUDENT DEVELOPMENT (STU)**

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<tr>
<th>Course</th>
<th>Title</th>
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<th>CR/NC Option</th>
<th>Format</th>
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<tbody>
<tr>
<td>STU 1</td>
<td>COLLEGE SUCCESS (formerly GS 1) - 3 Units (F/S)</td>
<td>3</td>
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<td>This intensive course is designed to assist students in obtaining the skills and knowledge necessary to reach their educational objectives. Students will have an opportunity to examine controversial issues of value and conflict, employ effective methods of stress management, and most importantly, apply strategies for achieving academic success. Topics covered include: motivation and discipline, memory development, time management, communication skills, career and transfer planning and a wide variety of student skills and techniques for college success.</td>
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<tr>
<td>STU 10</td>
<td>INTRODUCTION TO PEER TUTORING (formerly GS 10)</td>
<td>.5-2</td>
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<td></td>
<td>Practical skills necessary to function as a peer tutor, to train in human relation techniques, individual differences in learning styles, the importance of independence, good study habits and educational methods used to promote good learning. The course may be offered in other formats for distance learning.</td>
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<tr>
<td>STU 42</td>
<td>STUDENT LEADERSHIP (formerly STSV 42AB) - 2 Units (F)</td>
<td>2</td>
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<td>Designed to develop leadership qualities in students desirous of better understanding the principles of publicity, finance, organization procedures, group dynamics and human relations. Includes research, discussion and lectures in the techniques of leadership, group planning, and parliamentary procedure.</td>
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</table>
In general, Theatre Arts Department courses have recommended eligibility skill levels of ENGL 190 and 100-199 series mathematics. Exceptions to this general recommendation: THTR 5, THTR 20, THTR 21, THTR 42 and THTR 81. See the specific course description for these recommendations.

**THEATRE ARTS (THTR)**

In general, Theatre Arts Department courses have recommended eligibility skill levels of ENGL 190 and 100-199 series mathematics. Exceptions to this general recommendation: THTR 5, THTR 20, THTR 21, THTR 42 and THTR 81. See the specific course description for these recommendations.

**THTR 1 INTRODUCTION TO THEATRE ARTS - 3 Units (CAN # DRAM 18) (F/S)**
Class Hours: 54 lecture total
This course is a survey of Theatre Arts including dramatic structure, performance style, plays, terminology, history, criticism, and stagecraft. Students will develop an appreciation for the theatre arts through lectures, viewing, critiquing, and participating in college productions. This course fulfills the Arts requirement for General Ed transfer and is required for the Theatre Certificate.

**THTR 5 20TH CENTURY THEATRE - 3 Units (I)**
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
This is a survey course in trends and developments of 20th Century theatre. Major playwrights (Ibsen, Chekhov, Miller), personalities (Craig, Artaud), and theatre innovators (Brecht) of this century will be examined. Mainstream and radical influences as well as the impact of technology on plays and performances will be discussed. This course fulfills the Arts requirement for General Ed. Transfer and is required for Theatre majors.

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THTR 8  THEATRE APPRECIATION I - 3 Units (F/S)
Class Hours: 54 lecture total
In this course students will read a selection of plays from the Greeks to Elizabethan eras. They will learn about the historical context of each play and how to interpret and transform scripts for production. Topics include: historical development and context, text analysis, acting style, theme, language, diction, set, audience, gender issues, special effects, and cultural significance. Theatre Appreciation I or II is required for the Theatre Certificate.

THTR 9  THEATRE APPRECIATION II - 3 Units (I)
Class Hours: 54 lecture total
In this course students will read a selection of plays from the Jacobean to the Contemporary eras. They will learn about the historical context of each play and how to interpret and transform scripts for production. Topics include: historical development and context, text analysis, acting style, theme, language, diction, set, audience, gender issues, special effects, and cultural significance. Theatre Appreciation I or II is required for the Theatre Certificate.

THTR 12  ACTING I - 3 Units (CAN # DRAM 8) (F/S)
Class Hours: 45 lecture/27 lab
This course teaches the fundamentals of what it is to be an actor. Topics covered include the use of senses, the voice, the body, emotions and building a character. Students participate in individual and group exercises, theatre games and acting projects. Students learn the vocabulary of acting and view/critique on-campus productions. This course is required for theatre majors; non-majors are welcome.

THTR 13  ACTING II: PHYSICAL THEATRE AND VOICE FOR THE STAGE - 3 Units (I)
Prerequisite: A grade of C or higher in THTR 12
Class Hours: 45 lecture/27 lab total
This course offers detailed application of techniques explored in beginning acting. These areas include: styles, articulation, analysis of emotional content of dramatic texts, mask and movement work. In this course the voice and body are used as creative and interpretive tools. Designed for the Theatre Arts Core Program, acting and directing concentration; may not be challenged, must be taken for a grade, and is transferable.

THTR 20  READER’S THEATRE (formerly THTR 20AD) - 1-3 Units (I)
Class Hours: 54-162 lab total
A course dealing with the oral presentation of literature by two or more readers. Areas of study will include character development, performance techniques, material selection, analysis and adaptation, vocalization, and interpretation of scripts. Participation in public performances on and off campus is required. Note: Since subject matter varies each time the course is taught, this course may be repeated three times for a total of four enrollments.

THTR 21  ONE-ACT PRODUCTIONS (formerly THTR 21AD) – 1-3 Units (I)
Class Hours: 54-162 lab total
In this course, students produce and publicly perform one-act plays. Students will attend rehearsals and performances, and discuss plays as they progress. This course may be repeated three times for a total of four enrollments.

THTR 23  MAINSTAGE PRODUCTION I - DRAMA (formerly THTR 23AD) - 1-4 Units (I)
Class Hours: 54-216 lab total
In this course students rehearse, prepare and perform a mainstage play. The course is required for theatre majors, non-majors are welcome. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.

THTR 24  MAINSTAGE PRODUCTION II - MUSIC (formerly THTR 24AD) - 1-4 Units (CR/NC Option) (I)
Class Hours: 54-216 lab total
A course which focuses on the rehearsal and performance of the musical elements of a major dramatic work. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.

THTR 25  MAINSTAGE PRODUCTION II - CHOREOGRAPHY (formerly THTR 25AD) - 1-4 Units (CR/NC Option) (I)
Class Hours: 54-216 lab total
A course that teaches basic stage movement and dance for large cast plays and music theatre. Class projects and rehearsal activities will include participation in choreography in class or in theatre productions. Note: The authors, genre, and production styles will change each time this class is taught; therefore, it may be repeated three times for a maximum of four enrollments.

THTR 26  MAINSTAGE PRODUCTION II - DRAMA (formerly THTR 26AD) - 1-4 Units (CR/NC Option) (I)
Class Hours: 54-216 lab total
A course which focuses on the rehearsal and dramatic performance of a large cast dramatic work or musical. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.

THTR 29  DIRECTING (formerly THTR 22EH) - 2 Units (CR/NC Option) (I)
Class Hours: 18 lecture/54 lab total
This course is designed to introduce the student to the background, function and techniques of the stage director. Included in the course will be an investigation of the principles involved in script selection and interpretation, the fundamentals of casting, rehearsal techniques, blocking, aims and conduct, rehearsal scheduling, and the preparation of a director's prompt book. Students should have previous experience in theatre performance and production. Note: This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice.
<table>
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<tr>
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<tbody>
<tr>
<td>THTR 30</td>
<td>STAGECRAFT I (formerly THTR 35) - 3 Units (CR/NC Option)</td>
<td>3 Units</td>
<td>CAN # DRAM 12</td>
<td>(I)</td>
</tr>
<tr>
<td>THTR 31</td>
<td>STAGECRAFT II (formerly THTR 35) - 3 Units (CR/NC Option)</td>
<td>3 Units</td>
<td>CAN # DRAM 12</td>
<td>(I)</td>
</tr>
<tr>
<td>THTR 33</td>
<td>STAGE MANAGEMENT (formerly THTR 22IL) - 2 Units (CR/NC Option)</td>
<td>2 Units</td>
<td>CAN # DRAM 12</td>
<td>(I)</td>
</tr>
<tr>
<td>THTR 34</td>
<td>MAKEUP - 2 Units (CR/NC Option) (CAN # DRAM 14)</td>
<td>2 Units</td>
<td>CAN # DRAM 14</td>
<td>(I)</td>
</tr>
<tr>
<td>THTR 37</td>
<td>THEATRE MANAGEMENT - 3 Units</td>
<td>3 Units</td>
<td>CAN # DRAM 12</td>
<td>(I)</td>
</tr>
<tr>
<td>THTR 41</td>
<td>THEATRE LABORATORY (formerly THTR 41AD) - .5-.4 Units (CR/NC Option)</td>
<td>.5-.4 Units</td>
<td>CAN # DRAM 14</td>
<td>(F/S)</td>
</tr>
<tr>
<td>THTR 42</td>
<td>CHILDREN'S THEATRE LABORATORY (formerly THTR 42AD) - .5-.4 Units (CR/NC Option)</td>
<td>.5-.4 Units</td>
<td>CAN # DRAM 14</td>
<td>(I)</td>
</tr>
<tr>
<td>THTR 50</td>
<td>CHILDREN'S THEATRE PRODUCTION - DRAMA (formerly THTR 50AD) - 1-3 Units (CR/NC Option)</td>
<td>1-3 Units</td>
<td>CAN # DRAM 12</td>
<td>(I)</td>
</tr>
<tr>
<td>THTR 51</td>
<td>CHILDREN'S THEATRE PRODUCTION-CHOREOGRAPHY (formerly THTR 51AD) - 1-3 Units (CR/NC Option)</td>
<td>1-3 Units</td>
<td>CAN # DRAM 12</td>
<td>(I)</td>
</tr>
<tr>
<td>THTR 52</td>
<td>CHILDREN'S THEATRE PRODUCTION - MUSIC - (formerly THTR 52AD) - 1-3 Units (CR/NC Option)</td>
<td>1-3 Units</td>
<td>CAN # DRAM 14</td>
<td>(I)</td>
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<tbody>
<tr>
<td>THTR 60</td>
<td>SPECIAL PROJECTS-PRODUCTION (formerly THTR 60AD) - 1-3 Units (I)</td>
<td>1-3</td>
<td>Class Hours: 54-162 lab total. A course that provides specialized training in specific (advanced) 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, i.e., special vocal skills, acting methods, stage lighting techniques, scenographic projection, prosthetic-device makeup, puppetry, advanced elements of stagecraft, mime, and/or any other technique needed to satisfy and complement a successful theatrical performance. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.</td>
</tr>
<tr>
<td>THTR 61</td>
<td>COSTUMING (formerly THTR 22AD) - 1-3 Units (CR/NC Option) (I)</td>
<td>1-3</td>
<td>Class Hours: 54-162 lab total. A course that focuses on special projects in costume building for stage productions. Students will receive special instruction in sewing techniques for the stage, pattern drawing, the costumer's function during the running of a show and costume maintenance. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.</td>
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<tr>
<td>THTR 70</td>
<td>REPERTORY THEATRE I - 1-10 Units (Summer/I)</td>
<td>1-10</td>
<td>Class Hours: 54-540 lab total (54 hours per unit) In this course students will rehearse and perform major dramatic works in a repertory theatre format. Students will participate in a theatrical company/ensemble. They will share in the preparation, rehearsal, promotion, and public performance of a series of plays, musicals, or theatrical productions. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.</td>
</tr>
<tr>
<td>THTR 74</td>
<td>REPERTORY THEATRE - TECHNICAL - 1-10 Units (I)</td>
<td>1-10</td>
<td>Class Hours: 54-540 lab total (54 hours per unit) A laboratory course in which student will gain work experience and training in technical Repertory Theatre practices. Students may work progressively in one or more of the following areas: scenery construction, fabrication and rigging; console operations; stage management; lighting; sound; costumes, wardrobe; properties; make-up; publicity; house management; concessions, and running crews. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.</td>
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<tr>
<td>THTR 81</td>
<td>INTRODUCTION TO PLAYWRITING (Drama: Play, Performance &amp; Perception)- 2 Units (CR/NC Option)(I)</td>
<td>2</td>
<td>Class Hours: 18 lecture/54 lab total An examination of the elements of the dramatic script. The course consists of four main areas of investigation: critiquing the script; playwrights; plotting and theatre conventions; creating motivated characters--heroes, heroines, villains and foils. This course will guide the student toward creating scripts and analyzing their problems and help them distinguish drama from the performed theatre, i.e., scenarios for action.</td>
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<tr>
<td>THTR 97</td>
<td>SPECIAL STUDIO TOPICS: THEATRE - 1-3 Units (CR/NC Option) (I)</td>
<td>1-3</td>
<td>Class Hours: 54-162 lab total This course is designed to give students studio-based instruction and experience in a variety of theatre processes and techniques not regularly covered in other theatre courses. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Theatre majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.</td>
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<tr>
<td>THTR 98</td>
<td>SPECIAL TOPICS: THEATRE – 1-3 Units (CR/NC Option) (I)</td>
<td>1-3</td>
<td>Class Hours: 18-54 lecture total This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge and contemporary issues in the field of theatre. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Theatre majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.</td>
</tr>
<tr>
<td>THTR 153</td>
<td>COMMUNITY DRAMA I - 1-3 Units (CR/NC Option) (I)</td>
<td>1-3</td>
<td>Class Hours: 54-162 lab total Designed specifically for small community groups in off campus facilities, providing experience in the acting and technical production of scene, one-act, and small cast plays. Students will be involved in the staging and rehearsal of scenes and plays to be performed during class in the following areas: acting, makeup, lighting, sound, scenery development, costuming, stage management, and publicity. Students will observe rehearsals and performances and discuss plays as they progress. Note: Since subject matter varies each time the course is taught, it may be repeated three times for a maximum of four enrollments.</td>
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<tr>
<td>THTR 301</td>
<td>APPLIED THEATRE TECHNIQUES-TECHNICAL (formerly THTR 301AD) - 0 Units (I)</td>
<td>0</td>
<td>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.</td>
</tr>
<tr>
<td>THTR 302</td>
<td>APPLIED THEATRE -DRAMATIC - 0 Units (I)</td>
<td>0</td>
<td>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 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.</td>
</tr>
</tbody>
</table>
VETERINARY TECHNICIAN (VETT)

VETT 1  VETERINARY ANATOMY, PHYSIOLOGY AND MEDICAL TERMINOLOGY (formerly AGRI 62) - 4 Units  (I)

Prerequisite: A grade of C or higher in VETT 1
Class Hours: 54 lecture/54 lab total

This course is the beginning sequence of three required courses for the Veterinary Technology curriculum. Topics covered include basic animal care and management, feeding species identification, behavior, handling skills, animal restraint, sanitation, personal hygiene, study of pharmacological agents, drug use, actions and laws, emergency first aid, zoonotic disease risk factor, animal nursing skills, instruments and equipment, terminology, veterinary practice ethics and legal responsibilities.

VETT 2  FUNDAMENTALS OF ANIMAL HEALTH (formerly AGRI 63) - 4 Units  (I)

Prerequisite: A grade of C or higher in VETT 1
Class Hours: 54 lecture/54 lab total

This course is for students enrolled in the spring semester of their first year in the Veterinary Technology curriculum. The course provides an introduction to infectious and non-infectious diseases and conditions of domestic animals. Material covered includes an introduction to infectious and non-infectious diseases and conditions of domestic animals. Material covered includes the etiology, pathogenesis, pathophysiology, and clinical signs of each disease. The course also includes lectures, demonstrations, and laboratory exercises covering routine clinical examinations of blood, urine and feces from several species. Significance of altered value commonly encountered in clinical medicine presented. External and internal parasites, identification, life cycle and clinical importance will be discussed.

VETT 3  HEALTH AND DISEASES OF ANIMALS (formerly AGRI 60) - 4 Units  (I)

Prerequisite: A grade of C or higher in VETT 2
Class Hours: 54 lecture/54 lab total

This course is for students enrolled in their second year of the Veterinary Technology curriculum. The course provides an introduction to infectious and non-infectious diseases and conditions of domestic animals. Material covered includes the etiology, pathogenesis, pathophysiology, and clinical signs of each disease. This course also includes an introduction to infectious and non-infectious diseases and conditions of domestic animals. Material covered includes the etiology, pathogenesis, pathophysiology, and clinical signs of each disease. The student practices fundamental nursing skills in the Clinical Skills Laboratory prior to clinical assignment in long-term and acute care settings.

VETT 4  VETERINARY RADIOLOGY AND IMAGING – 2 Units  (F)

Prerequisite: A grade of C or higher in VETT 2
Class Hours: 27 lecture/27 lab total

Acquaints the student with the use of radiography, including radiographic duties of the Veterinary Technician curriculum. Special emphasis on medical, veterinary and radiographic terminology; elementary radiation and electrical protection; technical principles, and equipment operation. Fundamentals of latent and visible image formation, x-ray film characteristics, intensifying screens and film holders; theory and application of darkroom chemistry and processing; use and maintenance of veterinary x-ray processing equipment.

VETT 5  VETERINARY ANESTHESIOLOGY, SURGICAL ASSISTING AND DENTISTRY (formerly AGRI 61) - 4 Units  (I)

Prerequisite: A grade of C or higher in VETT 2
Class Hours: 54 lecture/54 lab total

Includes lectures covering animal surgical and medical nursing techniques and dental hygiene. Procedures and techniques with intravenous and inhalation anesthetics, surgical asepsis, skin preparation, instrument sterilization techniques and monitoring patients for vital signs are presented. Anesthetic drugs are discussed according to classification, mode of action, method of action and method of administration.

VETT 6  CARE OF EXOTIC AND LAB ANIMALS (formerly AGRI 66) - 1 Unit  (I)

Prerequisite: A grade of C or higher in VETT 2
Class Hours: 18 lecture total

This course will emphasize the necessary skills, and abilities required for a veterinary technician in laboratory animals. This theory should be complemented by an on-the-job training program working under the direct supervision of a California licensed veterinarian. This course is offered in partial fulfillment of the requirements to sit for the State Registry Exam via the Alternate Route.

VOCATIONAL NURSING (VOCN)

See Also: HEOC and REGN

VOCN 160  FOUNDATIONS OF NURSING PRACTICE - 15 Units  (F/S)

Class Hours: 144 lecture/378 lab total

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  (F/S)
Prerequisite: A grade of C or higher in VOCN 160
Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 144 lecture/288 lab total
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 (formerly VOCN 161B) - 13 Units  (F/S)
Prerequisite: A grade of C or higher in VOCN 161
Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 144 lecture/288 lab total
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 177  INTRODUCTION TO WASTEWATER TREATMENT (formerly NR 177) - 3 Units  (CR/NC Option)  (I)
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 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 (formerly NR 180) - 3 Units  (CR/NC Option)  (I)
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 (formerly NR 181) - 3 Units  (I)
Advisory: A grade of C or higher in WTT 180
Class Hours: 54 lecture total
A course in water supply and treatment, covering historical development of water quality control practices, water sources, public health aspects of water supply, chemical treatment, and evaluation of the various treatment processes. Will prepare the experienced operator for certification examinations.

WTT 183  INTERMEDIATE WASTEWATER TREATMENT (formerly NR 183) - 3 Units  (CR/NC Option)  (I)
Class Hours: 54 lecture total
To 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 (formerly NR 184) - 3 Units  (I)
Advisory: A grade of C or higher in WTT 180
Class Hours: 54 lecture total
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 Examinations.

WTT 186  ADVANCED WASTEWATER TREATMENT (formerly NR 186 and NR 182) - 3 Units  (CR/NC Option)  (I)
Advisory: A grade of C or higher in WTT 177 or a grade of C or higher in WTT 183
Class Hours: 54 lecture total
Designed to provide the student with a more in-depth background in the design, operation, and maintenance of wastewater treatment plants and to prepare the experienced operator for higher level certification examinations.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
</table>
| WELD 56    | WELDING *(formerly IART 56)* - 2 Units *(I)*                                 | 2     | 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 *(F/S)*                                          | 3     | Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.  
Class Hours: 36 lecture/72 lab total  
A beginning course designed for the student interested in acquiring basic welding skills to be used in a trade or service occupation. Emphasis is placed on oxyacetylene and arc welding in all positions. |
| WELD 94    | WORKSITE LEARNING FOR WELDING TECHNOLOGY - 1-4 Units *(F/S)*                 | 1-4   | 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: 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. This course may be repeated three times for a maximum of 16 units or four total enrollments since course content varies and skills are enhanced by supervised repetition and practice. |
| WELD 130   | GENERAL WELDING/SHOP AND METALS *(formerly WELD 130AB and WELD 230AB)* - 1 Unit *(CR/NC Option) *(F/S/I)* | 1     | Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.  
Class Hours: 54 lab total  
Designed for students interested in the fundamentals of metalworking. Subject areas and activities will emphasize metal identification, proper and safe use of hand tools, power tools, bench metals, welding, and machine tool operations. Note: This course may be repeated three times for a total of four enrollments since course content varies and skills are enhanced by supervised repetition and practice. |
| WELD 170   | INTRODUCTION TO ARC WELDING - 3 Units *(F/S)*                                | 3     | Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.  
Class Hours: 36 lecture/72 lab total  
A course to advance beginning arc welding skills with an emphasis on SMAW. Power sources, electrode identification, weldability of metals, joint design, air arc, and oxyacetylene cutting, and introduction to GTAW and GMAW are covered in this course. Course activities include learning to weld stringer and weave beads, butt and fillet welds in flat, horizontal, vertical, and overhead positions. |
| WELD 171   | INTERMEDIATE ARC WELDING *(formerly WELD 171AB)* - 3 Units *(S)*            | 3     | Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.  
Class Hours: 36 lecture/72 lab total  
A course to advance arc welding skills with emphasis on vertical and overhead welding. Course activities prepare the student for weld certification and advanced arc welding classes. Weld symbols, aluminum arc and cast iron welding are covered in this course. |
| WELD 172   | SHEET METAL FABRICATION (RESIDENTIAL AND COMMERCIAL) - 3 Units *(I)*         | 3     | Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.  
Class Hours: 36 lecture/72 lab total  
This is an introductory-level residential and commercial sheet metal working course. It is intended for the carpentry, welding, aviation mechanics, or metal working job entry-level student who needs to be familiar with sheet metal practices. Course work will include classroom and laboratory instruction in sheet metal equipment, parallel and transition layout and duct construction, duct installations, residential and commercial duct systems and materials as related to heating and cooling systems, flashings and flashing installations. |

*F* and *S* indicate semester course is usually offered. *I* indicates course may not be offered every year.  
Subject to change. Check the current class schedule.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 173</td>
<td>STRUCTURAL STEEL METAL FABRICATION</td>
<td>3</td>
<td>A grade of C or higher in WELD 70 or WELD 170 or previous welding or fabrication experience</td>
</tr>
<tr>
<td>WELD 174</td>
<td>STRUCTURAL STEEL MIG WELDING</td>
<td>3</td>
<td>A grade of C or higher in WELD 175</td>
</tr>
<tr>
<td>WELD 175</td>
<td>TIG WELDING</td>
<td>3</td>
<td>A grade of C or higher in WELD 171 or trade welding experience</td>
</tr>
<tr>
<td>WELD 176</td>
<td>GMAW MIG WELDING (LIGHT GAUGE AND NONFERROUS METAL)</td>
<td>3</td>
<td>A grade of C or higher in WELD 170 or trade welding experience</td>
</tr>
<tr>
<td>WELD 178</td>
<td>PIPE WELDING FUNDAMENTALS</td>
<td>3</td>
<td>A grade of C or higher in WELD 170 or equal trade welding experience</td>
</tr>
<tr>
<td>WELD 182</td>
<td>ADVANCED ARC WELDING</td>
<td>1</td>
<td>A grade of C or higher in WELD 175</td>
</tr>
<tr>
<td>WELD 184</td>
<td>ADVANCED GTAW (TIG) WELDING</td>
<td>1</td>
<td>A grade of C or higher in WELD 175</td>
</tr>
</tbody>
</table>

**Advisory:** 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. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.

**Class Hours:**
- WELD 173: 36 lecture/72 lab total
- WELD 174: 36 lecture/72 lab total
- WELD 175: 36 lecture/72 lab total
- WELD 176: 36 lecture/72 lab total
- WELD 178: 36 lecture/72 lab total
- WELD 182: 72 lab total
- WELD 184: 72 lab total

**Note:** This course may be repeated one time for a total of two enrollments since the course content varies and skills are enhanced by supervised repetition and practice.
ZOOLOGY (ZOOL)

ZOOL 1  GENERAL ZOOLOGY - 4 Units (CAN# BIOL 4) (BIOL SEQ A) (F/S)
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Class Hours: 36 lecture/108 lab total
The study of the major divisions of the animal kingdom with emphasis on the origin, adaptations, functions, and development.

ZOOL 105  HERPETOLOGY OF SHASTA COUNTY - 1 Unit (CR/NC Option) (S)
Note: Field trips are an integral part of the course and are therefore mandatory.
Class Hours: 18 lecture/9 lab (field trip) total
Designed for individuals interested in natural history and field biology by providing the student with a basic awareness of the diversity of amphibians and reptiles that inhabit the local area. Lectures will feature slides, diagrams, maps and other media to present concepts in anatomy, physiology, behavior, systematics and distribution. The students will use various capture techniques and learn to record data and observations in a notebook format while in the field. Moderately rigorous hiking may be involved.

ZOOL 163  ORNITOLOGY - 1 Unit (CR/NC Option) (I)
Class Hours: 18 lecture/16 lab (Four 4-hour field trips required)
Designed for birdwatchers and open to students to fulfill part of the general education requirements in science. Lectures will feature films, slides, records, maps, and other media to present concepts in anatomy, physiology, behavior and distribution. Students will use various field techniques for studying bird populations. Biological science majors should be aware this course is not transferable as part of their major requirements.

WSL 94  GENERAL WORKSITE LEARNING - 1-3 Units (I)
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, and maintain concurrent enrollment in seven units of credit including Worksite Learning. A student can enroll in WSL with no other unit requirements during the summer session. Students must check with the Financial Aid Office for eligibility requirements.
Note: During summer session WSL is considered an Alternate Plan and the student is limited to one other class (not to exceed 3 units)
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. This course may be repeated two times for a maximum of 6 units or three total enrollments since course content varies and skills are enhanced by supervised repetition and practice.

WORKSITE LEARNING (WSL)

WELD 186  ADVANCED PIPE WELDING - 2 Units (F/S)
Prerequisite: A grade of C or higher in WELD 178
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 108 lab total
An advanced pipe welding class with emphasis on ASME, AWS, or API certification. Course instruction includes welding codes, pipe classification and identification. Completion of the class does not guarantee certification unless welding procedure qualification tests are passed. Note: This course may be repeated one time for a total of two enrollments since the course content varies and skills are enhanced by supervised repetition and practice.

WELD 188  ADVANCED GMAW (MIG) WELDING - 1 Unit (F)
Prerequisite: A grade of C or higher in WELD 174 or WELD 176
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 72 lab total
An advanced welding laboratory class with emphasis on vertical and overhead welding. This class is designed for the student interested in improving his/her beginning skills in order to prepare for entry into the job force as a GMAW (MIG) welder. Note: This course may be repeated one time for a total of two enrollments since the course content varies and skills are enhanced by supervised repetition and practice.

WELD 197  SPECIAL TOPICS IN WELDING TECHNOLOGY - .5-2 Units (CR/NC Option) (I)
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in the field of Welding Technology. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Welding Technology majors; open to anyone with an interest in the topic. Note: This course may be repeated three times for a total of four enrollments.

“F” and “S” indicate semester course is usually offered. “I” indicates course may not be offered every year. Subject to change. Check the current class schedule.
ABTS, MARVIN L. (1986) Anatomy; B.S., Lewis and Clark College; M.S., Ph.D., Portland State University

ADAMS, JOAN E. (1969) English/French; A.B., M.A., University of California, Davis

ALBRIGHT, JANET (1983) Acquisitions Librarian; B.A., M.A., University of California, Los Angeles

ANDERSON, CATHERINE E. (1988) Mathematics; B.A., Humboldt State University; M.A., Univ. of Calif. Santa Cruz

ANTON, WAYNE (2005) Associate Degree Nursing; M.S., B.S., California State University, Chico

ANTON, CATHERINE E. (1988) Mathematics; B.A., M.A., University of California, Davis

ANDREWS, JANE (2005) Associate Degree Nursing; M.S., B.S., California State University, Chico

ANTON, WAYNE (2000) Counseling, B.A., University of Arizona, Tucson; M.S., Ph.D., Miami University, Oxford, Ohio

BAILEY, TERRY (1977) Home Economics; B.S., California State University, Chico; M.S., Oregon State University

BAKER, LENA (2001) English/Writing Center; B.A., Drake University, Des Moines, Iowa; M.A., Texas A&M, Kingsville, Texas

BANGHART, S. BRAD (1996) CIS/Electronics/Electronics Technology; A.A., Shasta College; A.A., Santa Rosa Jr. College; B.A., California State University, Chico; M.S., Capella University, Minneapolis, MN

BERISSO, CRISTINA (1999) Math; Licenciado en Fisica, Universidad Nacional de Buenos Aires; Ph.D., University of Oxford, United Kingdom

BERKOW, PETER F. (1990) Journalism/English; B.A., Northeastern Illinois University; M.A., California State Univ., Chico

BITTNER, ROBERT (1991) Mathematics; A.S., Linn-Benton Community College; B.S., University of Wisconsin-LaCrosse; M.S., University of Wisconsin-Milwaukee

BLASER, MARK (1996) Chemistry; B.A., Carleton College, Northfield, MN; M.S., Univ. of Colorado, Boulder

BODEEN, TOBY (1998) Counselor; B.A., M.S., University of Wisconsin, Stout

BOGENGER, REBECCA (2003) Psychological Counselor, M.A., California State University, Sacramento; B.A., California State University, Chico

BORG, CAROLYN (1990) Counselor; B.A., Biola College; M.S., California State University, Long Beach; Ed.D., Oregon State University, Corvallis

BOSWORTH, JOAN (1976) Dean, Science, Mathematics, Industry and Natural Resources; B.S., M.A., California State University, Chico

BRAZIL, KELLY (2002) Head Coach – Women’s Volleyball/Physical Education; B.A., California State University, Humboldt

BROOKSHAW, KEITH (1988) Director, EOPS/Special Services; A.A., Foothill College; B.A., University of Calif. Davis; M.S., Calif. State University, Hayward; Ed. D., University of Southern California

BYRNE, CANDACE (2002) English; B.A., Goucher College, Towson, MD; M.A., California State University, Humboldt; Ph.D., University of Oregon

BUSH, DAVID (1981) Mathematics; B.A., Chapman College; M.A., California State University, Fullerton

CALKINS, PAUL (2004) English; B.B., University of California, Irvine; M.A., University of California, Berkeley

CICERO, JOHN (1990) Business; B.A., University of Rochester; M.B.A., Ph.D., Syracuse University

CINGRANI, DONALD (2005) Accounting; B.S., San Fernando Valley State College

CONCKLIN, STEPHEN (1977) Basic Education for Handicapped; B.A., Calif. State University, Hayward; M.A., University of Santa Clara; Ed. D., Univ. of San Francisco

COOPER, WILLIAM D. (1999) Spanish; B.A., University of California, Berkeley; M.A., Univ. of Massachusetts, Amherst

CORT, CHARLES (1995) Dental Hygiene; A.S., B.S., Oregon Institute of Technology; M.A., National University

CRENSHAW, KENDALL (1991) Counselor; B.A., Chico; M.A., University of Nevada, Reno

CUSHNIE, LOIS (1996) Counselor; B.A., Wartburg College; M.A., University of La Verne

DEGNAN, TERESA K. (2000) Nursing; B.S.N., Ball State University, Muncie, Indiana; M.S.N., California State University, Long Beach


DOHERTY, CHARLES (1994) Nursing; B.S., Antioch College; B.S., California State University, Sacramento; M.S., University of Calif., Davis; M.S.N., Calif. State Univ., Chico

DRAGTEN, JEROEN (2000) Counselor; B.A., CSU, Chico; M.Ed., University of Phoenix


EBERLE, JOAN E. (1988) Basic Skills/Reading; B.S., Kansas State University; M.Ed., Brigham Young Univ.; Ed. D., Univ. of Nevada

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

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 Univ., Chico

FONG, LEO (2001) English; M.A., University of California at Riverside

FOOTE, BARBARA LYNN (1990) Nurse Aide/Home Health Aide; B.S.N., Calif. State University, Chico

FOX, KEVIN (2002) Mathematics; B.A., M.A., California State University, Sacramento

FRIGO, LENORE (2002) Psychology; B.A., Marquette University, Milwaukee; M.A., Ph.D., Louisiana State University

FUNK, NANCY (2004) Comptroller; A.A., Shasta College; B.S., California State University, Chico

GEE, JULIE (2005) Vocational Nursing; B.S., Montana State University

GENTRY, DAVID (2006) Art; M.A., California College of Art; B.A., University of Illinois
Academic and Administrative Staff – continued

GERARD, ROGER (2001) Hospitality Management; M.A., Northern Arizona University, Arizona

GESSERT, 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, California; B.A., California State University, Chico; M.S., University of La Verne

GOODMAN, DEBORAH (1997) Nurse; B.S.N., California State University, Chico; School Health Credential, MS(c) California State University, Sacramento

GOOGLINS, ROBERT P. (1981) Business Education; A.A., College of the Siskiyous; B.S., Sacramento State University; M.S., Northern Oregon College

GORDON, SCOTT (1999) Office Administration; M.B.A., Brigham Young University

GOTTLEIB, CLIFFORD (1984) Chemistry; B.S. University of Wisconsin; M.S., University of California, Davis


HAAS, LORRAINE (2002) Early Childhood Education; B.A., M.A., California State University, Sonoma

HAMAR, DIANA (2000) DSPS Counselor; A.A., Shasta College; B.A. Simpson College; M.A., University of San Francisco

HANNAFORD, MORGAN (1998) Biology; B.S., Sonoma State University; Ph.D., UC, Berkeley

HANSEN, STEVEN D. (1974) Agriculture/Physiology; B.S., Fresno State University; M.S., University of California, Davis


HENDERSON, KAREN (2000) Dental Hygiene; A.S., Sacramento City College; B.A., Simpson College

HOLLINGSWORTH, LAUREN (2006) English; B.A., University of California, Irvine; M.A., University of California, Riverside

HOM, KERI (1997) Counselor; B.A., University of California, Irvine; Ph.D., Washington State University

HORTON, JAMES (1973) Philosophy; B.A., Seattle Pacific College; B.D., Southern Methodist University; Rel.D., School of Theology at Claremont

HOUSSER, GARY (1999) Interim Dean, Center for Public Safety, Sports and Fitness/Athletic Director; B.S., M.S. Ed., Oregon State University, Corvallis, Oregon


JACKSON, CATHERINE (2006) Director of Planning and Research; Ph.D., Johns Hopkins University; M.A., Standford University; BA, UCLA

JOHNSON, RONALD (2000) Dean of Fine Arts & Communication; B. Mus., West Virginia University; M. Mus., West Virginia University; Ed.D., Oregon State University

JUHASZ, B. ZENA (1990) English; B.S., Lesley College; M.A., California State University, Chico

KEATING, JAMES F. (1989) Physical Education; B.A., Jamestown College; M.Ed., University of North Dakota

KELLY, JASON (2001) EOPS/CARE/Mentoring Counselor; B.A., Sacramento State Univ.; M.S., University of La Verne

KEMP, MARC (2001) English; B.A., University of California at Santa Barbara; M.A., San Francisco State University

KENNEDY, SHARON (1991) Counselor; B.S., Calif. State University, Fresno; M.S., San Francisco State University

KUTRAS, CHRIS (1975) History/Political Science; A.A., Shasta College; B.A., M.A., California State University, Chico; Ph. D., University of San Francisco

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## Shasta College Emeritus Association

For more information on the Emeritus Association, please visit our website at:  [www.shastacollege.edu/emeritus.htm](http://www.shastacollege.edu/emeritus.htm)

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<td>David Dubose</td>
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### Emeritus Staff

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<td>Cheryl Flowers</td>
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<td>Peggy Blanchard</td>
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<td>Lynn Haring</td>
<td>Ann Newcomer</td>
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<td>Kathryn Brown</td>
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<td>Jacquelynn Owens</td>
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<td>Susan Anthis</td>
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Glossary of College Terms

A.A., Associate in Arts Degree – Liberal arts degree, designed for transfer.

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 means 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.

A.S., Associate in Science Degree - degree awarded for technical and occupational programs, and transfer science programs.

ASB - Associated Student Body of Shasta College. All Shasta College students are members of the ASB and are represented by an elected and appointed student government called the ASB Council.

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 Student 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.

Major - Area or field of concentration for occupational certificate or associate degree.

Matriculation – Matriculation is a process which brings Shasta College into an agreement with a student for the purpose of realizing that student's educational objectives. The process includes Application, Records, Assessment Testing, Counseling, and Orientation.

Nonresident - A person who has not lived continuously in California for one full year prior to enrollment.
**Glossary of College Terms - continued:**

**Part-time Student** - Any student enrolled in less than 12 units of course work.

**Pell Grant** - A federal financial aid grant available to qualified students that are enrolled in six or more units.

**Petition** - A request, usually written on a standard form, to adjust a study list or curriculum to fit an individual situation and/or request exception to a policy or regulation.

**Prerequisite** - A condition for enrollment in a course or a major. Prerequisites for courses usually consist of a previous course or courses in a related subject and/or the instructor's permission. Prerequisites are described in the Catalog course descriptions and indicated in the schedule of classes with an asterisk "*" following the course number.

**Probation** - An indication that performance is below standard because of academic or progress deficiencies; a trial period in which a student is permitted to redeem failing grades or deficient units.

**Registration** - The process of providing required information and enrolling in classes each semester.

**Resident** - A person who has resided in California for one full year prior to enrollment and who meets other residency requirements.

**Returning Student** - A student who has previously attended Shasta College but did not enroll during the most recent previous term.

**Semester** - A subdivision of the academic year into two semesters, usually Fall and Spring, each lasting approximately eighteen weeks. To convert semester units to quarter units, multiply by 3/2. To convert quarter units to semester units multiply by 2/3.

**Student Educational Plan** - A process that helps the student select a specific educational goal, describes the responsibilities of the student in reaching that goal, and states in written form the courses, programs and services required to achieve that goal. Required for financial aid and veteran students.

**T.B.A.** - 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 time of schedule printing. If the class has no specified hours, the student should contact the instructor to arrange the hours.

**Transcript** - Official copy of a student's academic record (courses and grades).

**Unit** - Courses are assigned a unit value based on one unit of credit for every hour of lecture or 3 hours of laboratory time per week by the student. A student's progress in the college is determined in part by the number of units completed.

**UC** - University of California – The nearest UC to Shasta College is located at Davis.

**University Center** – A partnership between Shasta College and several regional universities to bring four-year Bachelor’s degree programs to our District.

**Work Study** - Usually refers to "College Work Study," a program of federal aid that provides funds for student jobs on campus.
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