COLLEGE OF THE REDWOODS

Catalog of Information and Courses

2004-2005

Photo: Dana Wymer

COLLEGE OF THE REDWOODS

A California Community College

Eureka Campus
7351 Tompkins Hill Road
Eureka, CA 95501-9300

Call 707.476.4100
FAX 707.476.4400
Call Toll Free:
800.641.0400

Del Norte Campus
883 W. Washington Blvd.
Crescent City, CA 95531

Call 707.465.2300
FAX 707.464.6867

Mendocino Coast Campus
1211 Del Mar Drive
Fort Bragg, CA 95437

Call 707.962.2600
FAX 707.961.0943

Web Site
http://www.redwoods.edu

E-Mail Address
Enrollment@Redwoods.edu

President's Welcome

Welcome to College of the Redwoods. Congratulations on making the important decision to continue your education. As a college, we are dedicated to the success of each student. Our programs and services are designed specifically to help you meet your goals.

I would like to encourage you to explore what we have to offer. Take advantage of the resources provided. Challenge yourself. Get to know your classmates as well as the college's faculty and staff. Be involved in campus activities. Try something new. Ask questions. Whether you are coming directly from high school or returning to the classroom after a lengthy absence, you will find a wide array of opportunities here.

I'm glad you're here as part of our learning community as we celebrate 40 years of service on the north coast.

Dr. Casey Crabill

Photo: Bosha Struve

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General Information

Board of Trustees

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Bruce Emad . . . . . Eureka

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Meredith Harris, RN, MSN . . . . . Director, Nursing and Health Occupations

Joe Hash . . . . . Director, Physical Education and Athletics

College Calendar

Fall Semester 2004

Classes Begin, Fall Semester 2004 ..... August 23
Last day to drop a course and receive a refund ..... September 3
Last day to drop a course without a 'W' ..... September 3
All-College Holiday (Labor Day) ..... September 6
Last day to file CR/NC option (where available) ..... September 24
Last day to petition to Graduate ..... October 1
Last day for student-initiated drop ..... October 29
All-College Holiday (Veteran's Day) ..... November 12
All-College Holiday (Thanksgiving) ..... November 25 & 26
Final Exams ..... December 6-11
Fall Semester Ends ..... December 11
Semester Break ..... December 20 - January 3

AUGUST 2004

S	M	T	W	T	F	S
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SEPTEMBER 2004

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OCTOBER 2004

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NOVEMBER 2004

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DECEMBER 2004

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Winter Session 2005

Classes Begin, Winter Session 2005 ..... January 3
All-College Holiday (Martin Luther King, Jr.) ..... January 17
Winter Session Ends (Final exams) ..... January 21

Spring Semester 2005

Classes Begin, Spring Semester 2005 ..... January 24
Last day to drop a course and receive a refund ..... February 4
Last day to drop a course without a 'W' ..... February 4
Last day to petition to Graduate ..... February 7
No Classes (Lincoln Day) ..... February 18
All-College Holiday (Presidents) ..... February 21
Last day to file CR/NC option (where available) ..... February 25
Spring Break ..... March 14-19
Last day for student-initiated drop ..... April 8
Final Exams ..... May 16-21
Spring Semester Ends ..... May 21
Commencement (Del Norte) ..... May 20
Commencement (Eureka and K/T) ..... May 21
Commencement (Mendocino) ..... May 22

JANUARY 2005

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FEBRUARY 2005

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MARCH 2005

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APRIL 2005

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MAY 2005

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29	30	31				

Classes Begin
Classes End
Holiday
Final Exams
Commencement
No Classes/ Break

DISCLAIMER

The College reserves the right to amend, modify or otherwise revise any provision in this catalog for reasons including but not limited to:

1. Change in State Law, Education Code, Title 5 or other governing regulations pursuant to the operation of the College.
2. Changes in Board of Trustee Policy or Administrative Regulations.
3. Changes relating to funding, fees, instruction, support services or staffing of the college or any program or course thereof.

These changes may be made without prior notice and may supersede this publication or portion thereof.

FACILITIES

The College has three primary campuses and several additional instructional sites where courses and programs are offered to serve the educational needs of Humboldt, Del Norte, coastal Mendocino, and western Trinity counties.

Eureka campus

The Eureka campus serves approximately 5000 students and is located on a 270-acre site seven miles south of the city of Eureka. The college's full range of university transfer, professional, personal enrichment, and community education programs are available on the Eureka campus.

Del Norte campus

The Del Norte campus serves approximately 1000 students and is located on a 34-acre site in Crescent City, 80 miles north of Eureka and 20 miles south of the Oregon border. The Del Norte campus offers university transfer programs as well as specific degree and/or certificate programs in Addiction Studies, Business, Early Childhood Education, and Licensed Vocational Nursing.

Mendocino Coast campus

The Mendocino Coast campus serves approximately 1000 students and is located on a 20-acre site at the southern end of Fort Bragg, 135 miles south of Eureka and eight miles north of Mendocino. The Mendocino Coast campus offers university transfer programs as well as specific degree and/or certificate programs in Addiction Studies, Business, Early Childhood Education, Fine Woodworking, Graphic Communications, Marine Science Technology, Natural History, and Real Estate.

The college also offers selected courses and programs at two additional instructional sites: the Klamath-Trinity site, approximately 40 miles northeast of Eureka on the Hoopa Indian Reservation, and the Arcata instructional site, approximately seven miles north of Eureka.

Klamath-Trinity

Arcata instructional site

ACCREDITATION STATEMENT

College of the Redwoods is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, (10 Commercial Boulevard, Suite 204, Novato, CA 94949 (415) 506-0234), an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education.

Designated lower-division, baccalaureate-level courses at the College of the Redwoods are approved for transfer to all branches of the University of California (UC) and to all of the California State Universities (CSU). College of the Redwoods is approved for the education of veterans under the provisions of public law.

Photo: Paul DeMark

Exuberant College of the Redwoods graduates of the class of 2003.

Photo: Shaun Walker/The Times Standard

MOM'S BIG DAY

Brooke Raven smiles at her daughter, Annabelle, 18 months, after she receives her diploma and a rose from College of the Redwoods trustee Milt Dobkin during the school's graduation ceremony.

VALUES

A review of our mission and our philosophy, combined with a focus on the future, leads us to affirm these values as essential elements of this plan.

1. As a good steward of public trust and public resources, College of the Redwoods is committed to measuring results and to being publicly accountable.

2. College of the Redwoods is committed to responding to the needs of the community by addressing the educational needs of individuals because education can be a life changing experience. The College believes in sustaining multiple linkages among faculty, staff, students, administration, and the community. The College seeks to build awareness of education as a key to community growth and development.

3. College of the Redwoods is committed to creating and sustaining a welcoming environment that celebrates the diversity of its students, faculty, and staff. The college environment will support behaviors and attitudes that maximize inclusion, personal responsibility, interpersonal respect, and multicultural understanding.

4. The College will always strive for excellence, in managing its internal processes for maximum effectiveness and in producing measurable, valued outcomes. We recognize that excellence rests, in large part, in seeking and using broad-based involvement from internal and external constituencies.

5. College of the Redwoods is committed to doing our part towards the improvement of society and the human condition. With this general goal in mind, we are committed to increasing persons' awareness of education's potential to help make a lasting difference in a person's life. To this end, we recognize that everyone we serve has individual needs and aspirations. Thus, we are committed to helping our students meet their immediate educational goals, such as completing their lower-division education; earning an Associates degree; ensuring their ability to transfer to a four-year college or university; or obtaining gainful employment. Ultimately, all of our efforts on behalf of helping our students achieve their intermediate and long-term goals underscore our larger commitment to helping develop an informed, educated, caring citizenry—that is, a citizenry who, in part because of their experiences at College of the Redwoods, could help improve society and elevate the human condition.

PHILOSOPHY

The primary objective of the College is the success of each student. We consider education to be a process of intellectual and physical exploration that rests upon the mutual responsibility of the College and the student.

We recognize the dignity and intrinsic worth of the individual and acknowledge that individual needs, interests, and capacities vary.

In fulfilling these objectives and principles, we affirm our intention:

1. To provide the highest possible level of education and counseling to help students realize their personal goals;
2. To provide opportunities for development of moral values and ethical behavior;
3. To enhance self-esteem and a sense of individual responsibility; and
4. To instill an appreciation of the values and contributions of other cultures and increase global understanding among all students.

We will continuously seek and support a dedicated, highly qualified staff that is diverse in terms of cultural background, ethnicity, and intellectual perspective and that is committed to fostering a climate of academic freedom and collegiality. We will encourage and reward professional development for all staff and will all share in the responsibility for student outcomes.

College of the Redwoods affirms its responsibility to address the diverse civic needs of the many communities we serve and to provide leadership in the civic, cultural, and economic development of the North Coast region.

MISSION STATEMENT

The Redwoods Community College District has a commitment both to our students and to our community. We are committed to maximizing the success of each student with the expectation that each student will meet her or his educational goal, achieve appropriate learning outcomes in his/her courses and programs, and develop an appreciation for life-long learning. In partnership with other local agencies, we are also committed to enriching the economic vitality of the community whom we serve.

The following are the three equally important, primary missions of the Redwoods Community College District:

1. **Associate Degree and Certificate Programs**. The District will offer rigorous, high-quality educational programs leading to the Associate in Arts or Associate in Science Degree, Certificates of Achievement, or Certificates of Completion.
2. **Academic and Transfer Education.** The District will offer a high-quality core curriculum that will satisfy the lower-division general education and/or major preparation requirements for transfer to four-year colleges and universities.
3. **Professional and Technical Education.** The District will provide high-quality professional and technical programs that will allow students to obtain skills necessary to enter or advance in the workforce or to be better prepared for further education. These programs will be continuously articulated with the private and public sectors and with other institutions of higher education.

In support of these primary missions, the District will provide the appropriate level of information, programs, and activities to assist students in:

1. Gaining initial access and orientation to the College;
2. Assessing their interests and educational goals and developing plans that will help them achieve these goals;
3. Using current technological resources, innovative instructional resources, personalized tutorial services, and broad-based research tools; and
4. Choosing coursework preparatory to college-level work, if necessary—specifically, pre-collegiate math and English courses and courses in English as a second language (ESL).

To the extent possible, under state guidelines or with local funding, the District will provide the following life-long learning opportunities, as well as opportunities for enhancing and promoting the general welfare of the community:

1. **Non-Credit Adult Education.** The District will provide state-funded, adult education classes in response to local interests and needs and in cooperation with other local providers.
2. **Community Services.** The District will provide self-supporting avocational, recreational, and professional development classes, as well as cultural and community programs.
3. **Economic Development.** The District will participate with local business and industry and other educational and government agencies to foster the economic vitality of the North Coast region.

BECOMING A CR STUDENT

AS AN OPEN-ACCESS COMMUNITY COLLEGE, THE REDWOODS COMMUNITY COLLEGE DISTRICT WELCOMES STUDENTS FROM A VARIETY OF DIFFERENT BACKGROUNDS AND EXPERIENCES

HIGH SCHOOL GRADUATES

Anyone who has successfully completed the twelfth grade is eligible to enroll at College of the Redwoods.

NON-HIGH SCHOOL GRADUATES

Any person who is at least 18 years of age who does not have a high school diploma but is able to benefit from college-level instruction may also enroll, although in order to receive financial aid these students will have to meet some additional requirements.

YOUNGER STUDENTS

Students currently enrolled in the 9th through 12th grades who have a cumulative grade point average of at least 3.0 may be approved to take college courses for college credit at College of the Redwoods. Permission from the college, the high school principal and a parent is required.

Students under 18 years of age may also be eligible for enrollment without a high school diploma, but will be required to take and pass either a General Education Development test (GED) or the California Proficiency Examination.

TRANSFER STUDENTS

Students who have attended another accredited college may transfer to College of the Redwoods with advanced standing, depending on the outcome of an incoming transcript evaluation. During this process, the college will determine which courses will be accepted (lower division only) and if the student should be admitted to CR on probationary status. (Probation will apply if the student has less than a 2.0 cumulative grade point average from all previous colleges attended at the time of his/her initial enrollment at CR)

Students wishing to apply prior college credit to their CR degree as well as students wishing to receive financial aid will be **required** to submit official transcripts from all post-secondary institutions previously attended.

INTERNATIONAL STUDENTS

Every effort will be made to provide international students with general information about the college and the local area before and upon their arrival at the college. Based on the individual's particular academic goals and interests, new students will become part of an ongoing counseling and advising group, which will provide them the opportunity to learn about the many student learning support programs and services that are available to them. Additional information about initial enrollment and special regulations that may pertain to international students may be obtained by contacting the Director of Enrollment Services.

DETERMINING RESIDENCY

CALIFORNIA RESIDENCY

Each California college is charged with determining which students qualify to pay in-state fees. Generally speaking, to qualify as a resident of the State of California, students must have lived in California for more than one year prior to the first day of the term in which they wish to enroll. In addition, they must demonstrate that they intend to make California their permanent residence and will be asked to provide the college with the information required to make such a determination. Military personnel, public school employees, state employees and certain other persons may be exempt from residence requirements or may qualify to pay in-state fees by virtue of being the subject of special legislation. To avoid disappointment or confusion at the last minute, it is important that students have their residency status determined well in advance of the start of the term in which they wish to enroll.

OUT-OF-STATE RESIDENTS

Prospective students whose legal residence is outside the state of California will be required to pay non-resident tuition in addition to the California enrollment fees.

OREGON EXCHANGE PROGRAM

College of the Redwoods has made reciprocal agreements with three Oregon colleges to allow eligible CR students to attend Oregon colleges and eligible Oregon residents to attend College of the Redwoods at reduced rates. Participating colleges are: Oregon Institute of Technology (OIT), Southern Oregon State University (SOSU), and Rogue Community College (Grants Pass). Oregon residents who wish to enroll in any course at College of the Redwoods under this program must sign an agreement indicating that, if a California resident student is displaced from a class, the exchange student will voluntarily drop the course.

ENROLLMENT

GETTING STARTED AT COLLEGE OF THE REDWOODS

Photo: Paul DeMark

UNDERSTANDING WHAT THE WORD "MATRICULATION" MEANS IN A CALIFORNIA COMMUNITY COLLEGE SETTING

At College of the Redwoods, the enrollment process includes more than filling out an enrollment form, paying fees and registering for classes. There's a special program designed to help students succeed in college. It's called "matriculation" and it includes the following steps:

- assessment
- orientation
- academic advising
- registration
- the development of an educational plan

Participation in matriculation activities is required of all students who are:

- undecided about what their educational goals are;
- seeking an AA/AS degree;
- intending to transfer to a four-year college;
- enrolling in a vocational program resulting in a certificate; or
- enrolling in a basic skills course (any course numbered in the 300s).

As part of the matriculation process, the college makes the following commitments to its students:

- sensitively assess each student's aptitudes, interests, and skills;
- give students clear information about the college's programs, services, and policies;
- provide top-quality instruction;
- offer a wide variety of courses;
- provide academic support services to help students achieve their educational goal(s);
- track each student's progress toward his/her educational goal(s);
- help each student develop a comprehensive educational plan;
- thoughtfully counsel and advise students on issues related to their academic success;
- make student rights and responsibilities available to students in written form; and
- make the matriculation process efficient so that students are not discouraged from participating in it.

Similarly, students who participate in the matriculation process are expected to make the following commitments to the college:

- establish an educational goal prior to completing two semesters;
- attend class on a regular basis;
- strive to complete assignments and courses;
- meet with a counselor or advisor as needed to discuss educational issues and choices;
- utilize the academic support services that are available; and
- make as much progress toward their educational goal as possible each semester.

College of the Redwoods believes that students who meet these responsibilities will enhance their chances of reaching their educational goals and will have a more positive college experience in general.

EXEMPTIONS FROM MATRICULATION

While the college encourages every student to take advantage of the college's matriculation program, students may be exempted from certain parts of the program if they possess an AA/AS degree or higher and/or if they indicate that their educational goal is to:

- Prepare for a new career (acquire new job skills)
- Advance in current job/career (update current job skills)
- Maintain a state certificate or license (e.g., Nursing, Real Estate)
- Enroll solely for personal enrichment/recreation

Note: Students who are granted an exemption from matriculation must still meet all of the stated prerequisites for CR English and math courses.

ENROLLMENT AT COLLEGE OF THE REDWOODS: FIVE EASY STEPS

1. SUBMIT AN "OFFICIAL ENROLLMENT FORM"

A completed enrollment form is required of all new students as well as from students returning to College of the Redwoods after one or more semesters of absence. Enrollment forms are available on the CR website, as well as in the Enrollment Services Office or in the administrative offices at each instructional site. Completed forms may be dropped off or mailed to the Enrollment Services Offices at any instructional location.

In addition to the form itself, the following documents may also be required:

· **Transcripts of Previous College Work**: While the enrollment form will be accepted without transcripts attached, official transcripts MUST be submitted if a student wishes to have previous college work count toward the CR degree or if a student is applying for financial aid. It will save a great deal of time and energy for all concerned if transcripts can be provided at the time of initial registration.

· **G.E.D. or High School Proficiency Certificate:** Students under 18 years of age who have not obtained a high school diploma must provide a copy of one of these certificates prior to initial enrollment. Students who do not possess either of these certificates should inquire about taking the G.E.D. or the Ability to Benefit exam; for more information, contact the Academic Support Center or Counseling & Advising Center.

2. PARTICIPATE IN A SKILLS ASSESSMENT PROCESS

There are a variety of methods that CR's academic counselors and advisors use to develop individualized educational plans and to place students in the classes that are most likely to maximize their success.

One of the primary methods is to evaluate the scores that students receive on English and math assessment tests administered by the college through the Academic Support Center. These tests are often given during the one-day Redwood Days/Redwood Nights programs (new student orientation for Eureka students), or students may sign up to take them at a scheduled time prior to the beginning of each semester (these tests are also available at the Mendocino Coast and Del Norte campuses). If it is not possible to attend any of the scheduled sessions, individual arrangements can be made to take these exams at a convenient time either day or evening. Students with special testing needs should be sure to request accommodations prior to testing. Contact the Academic Support Center (Eureka campus) or the Counseling and Advising Office (Mendocino Coast and Del Norte) for more specific information.

New and returning students may not have to take these assessments if they can verify:

- that they have taken a comparable state-approved placement test at CR or another California community college within the past three years, or
- that they have taken a college level (degree applicable) English and/or math course with a "C" grade or higher from any accredited college, or
- that they have taken a College Entrance Examination Board Advance Placement Exam in English and/or math and received a score of 3, 4, or 5.

Students seeking these exemptions will be asked to provide written proof of the above to a counselor or advisor prior to registering for the English or math courses they wish to take.

3. PARTICIPATE IN AN INITIAL ACADEMIC ADVISING PROCESS

There are two different ways to fulfill this enrollment obligation:

OPTION A: SIGN UP FOR A REDWOOD DAYS/ REDWOOD NIGHTS ORIENTATION PROGRAM

At the Eureka campus, the college offers "Redwood Days/Redwood Nights": a comprehensive orientation program designed to help students get off to the best start possible on their college career. The length of the program will vary from 3-7 hours, depending on the presentation format and whether or not the assessment exams are done as part of the program or separately. No matter what, all students who participate will get a good general orientation to CR and will be given basic information about the many different academic and professional and technical program/course options available to them. Whether students are interested in transferring to a four-year institution or getting a CR degree or certificate, they will be given professional help in interpreting assessment test results, learning about degree programs and course requirements, and selecting classes for that critical first semester of enrollment. Students will also be given help with actually registering for their classes, and will learn about the different ways they may do so in the future: in person, by phone, and over the internet. All of this will greatly enhance all students' ability to succeed in their first term at the college, making it more likely that they will eventually complete the degree or certificate to which they aspire. They will also learn about the importance of meeting with a counselor during their first semester at CR to develop a comprehensive Student Educational Plan that will help them meet their long-term educational goals.

(continued)

ENROLLMENT

OPTION B: MAKE AN APPOINTMENT TO SEE AN ACADEMIC COUNSELOR OR ADVISOR

All of the assistance provided to new students as part of the Redwood Days/Nights program is also available to students on an individual basis at each of the college's instructional sites. On the Eureka campus the Counseling and Advising Center, as well as Disabled Students Programs and Services, offer these services to students during the day and the early evening hours. The Del Norte and Mendocino Coast campuses also have Counseling Centers and D.S.P.S. offices, and the Klamath-Trinity and Arcata instructional sites offer basic information on a walk-in basis and provide more in-depth assistance by appointment. In addition to assessment testing, counselors are likely to use the following indicators to help them determine the extent to which a student is prepared for different levels of college course work:

- the student's high school grades;
- whether or not the student has had any prior college experience;
- the student's previous success at the college level, as reflected in his/her transcripts;
- how much high school English the student has taken and what grade the student received in the last English writing course s/he took;
- the highest level of math the student has completed as well as the grade the student received in the last math course s/he took;
- the student's past study habits;
- the number of employment-related and family obligations the student has; and
- the strength of the student's motivation to achieve his/her educational goal(s).

Since assessment is considered to be a key factor in providing students with important information about the level of their skills and their readiness for certain kinds of instruction, students are strongly advised not to skip this step in the enrollment process.

4. REGISTER FOR CLASSES

GENERAL REGISTRATION (FOR CREDIT COURSES)

Registration is the process by which students officially enroll in a class or classes. At CR, there are four terms, and thus four registration periods, each year: a 16-week fall semester, a 3-week winter session, a 16-week spring semester, and a 10-week summer session.

Term-specific Schedules of Classes, which include information about important deadlines and specific procedures, are readily available free of charge at each instructional site as well as at locations within each community the college serves. Class schedule information, along with up-to-date information about class changes and cancellations, is also available on the CR website: www.redwoods.edu.

After the semester has begun, students must have the instructor's permission to enroll in a specific class, and there are restrictions related to dropping courses, as well. Be sure to consult the Schedule of Classes for information regarding the processes and deadlines related to dropping and adding courses.

CR students may register by phone, via the web, or in person at each campus. New and returning students, as well as all continuing students, will be assigned specific registration dates and times for each term. Students may not register before the specified time, but may register at any time after the specified time has passed. With the exception of those who enroll within a few days of the beginning of a term, all students will receive written or electronic notices of the date and time of their registration appointments.

Students are not considered officially enrolled in a class until the registration process is completed and all required fees have been paid.

REGISTERING TO AUDIT A COURSE

When a student audits a course, it means that s/he intends to sit in on that course on a regular basis, but does not wish to receive any academic credit for it. Community members and students are welcome to audit courses on a space-available basis. This determination may not be made until the class has been in session for two weeks, to ensure that students wanting to take the course for credit have every opportunity to enroll before those wishing to audit the class are added to it. Those wishing to audit a course must:

1. Complete the regular CR Enrollment Form;
2. Complete the prerequisites for the course (if any);
3. Obtain an Audit Form from the Enrollment Services Office;
4. Obtain the signature of the instructor to verify that s/he approves of the audit;
5. Return the form to the Enrollment Services Office;
6. Pay the required fees.

Audited courses will appear on the student's permanent record (transcript) but no grades or credits will be recorded.

LIMITATIONS ON ENROLLMENT

Students who fall into the following categories may not be allowed to register:

- Students who are on academic probation or subject to dismissal from the college. These students will be required to meet with an academic counselor or advisor before they are allowed to register for classes. (See page 40 for more information.)
- Students who want to register for more than 18 units during a 16-week semester. These students will need written approval from an academic counselor or advisor.
- Students who are subject to conduct suspension or dismissal from the college. These students may only register if they have written approval from the Director, Student Development (Eureka Campus, Klamath/Trinity Site, Arcata Site) or the Campus Vice President (Mendocino Coast and Del Norte campuses).

(continued)

5. Complete a Student Educational Plan

After the semester is underway students are strongly encouraged to make an appointment with a counselor to develop a Student Educational Plan (SEP). This plan serves as a roadmap for the student as s/he progresses through the institution toward degree or certificate completion, and is based on each student's individual needs, personal/outside commitments, and educational goals. For those who are undecided about their educational plans, it is especially important to meet with a counselor during the first semester of enrollment at College of the Redwoods to try to determine more precisely what their academic and career interests may be. When students have SEP's to guide them, it is easier to maintain educational focus and forward momentum. It also prevents them from taking courses that are not required for the degree or certificate they seek if they are anxious to complete their degree in the most efficient way possible. Because these plans take a little concentrated time to develop, it is best to get them done mid-semester: October/November and February/March are the best times to plan to do this.

Student Responsibilities

Staff Photo

Report Change of Address to the College

A student who changes his/her place of residence (or changes any other address that may be used by the college to conduct official business) should report the change promptly to the Student Assistance Center (Eureka Campus) or the Enrollment Services Office (other instructional sites). Although this may not seem crucial at the time the change is made, financial aid checks, paychecks, and important registration and graduation information from the college may not reach its intended destination if this information is not kept up-to-date.

Report Changes in Academic Interests to the Counseling and Advising Center

The more current a student's educational plan, the more likely it is that s/he will progress through the required coursework in the most efficient way possible. Students thinking about making a program change should be sure to consult with the staff in the Counseling and Advising Center to understand how the change may affect the achievement of their new or their original educational goal.

Attend Courses on a Regular Basis

Since regular attendance is a critical factor in student success, students at the College are expected to attend all sessions of each class in which they are enrolled.

In general, absences may be considered excessive when the number of absences exceeds the total number of hours that the class meets during one week. All faculty are encouraged to include information about their attendance requirements in their course outlines; students should make certain they understand the attendance standards that are to be met in each class. Students who know that they will be absent from class for more than one week should notify the instructor (or appropriate Division office) in advance.

Drop Unwanted Classes to Avoid Unnecessary Failing Grades

During the first two weeks of each semester, instructors are required to drop students from their classes for non-attendance. After the the end of the second week of classes each semester, however, it is the student's responsibility to drop any/all classes that s/he does not plan to continue to attend/complete. If a student stops attending a class and fails to submit a drop card to the Student Assistance Center/ Enrollment Services Office by the published deadline, an "F" grade will be given.

Students may request approval to drop classes after the published deadline by completing a *Petition to Waive College Regulations* submitting it to the Student Assistance Center/ Enrollment Services Office. Approval will be based on verification of extenuating circumstances.

Officially Withdraw from the College (if necessary)

While it is our hope that all students will be able to complete the terms for which they register, there are times when students may need to drop all of their classes and withdraw completely from the College. When this occurs, the following steps must be followed:

- Drop all classes in which you are enrolled.
- Return all books and equipment that belong to the College.
- Pay all loans and financial obligations that are outstanding to the College.
- Contact the Office of Financial Aid (if a financial aid recipient).

If these things are not done, re-enrollment will be blocked and CR transcripts and other important records will not be released to other institutions or agencies.

Understand and follow degree or certificate requirements

Although counselors and advisors are available to help students plan their programs, each student is responsible for following the regulations set forth in the catalog and for selecting courses that will enable her/him to achieve the desired educational goals.

STUDENT FEES*

NOTE: Additional information about these fees, as well as a listing of persons who may be exempt from paying the fees listed below, may be found in Board of Trustees Policy 529 and Administrative Regulation 529.01.

MANDATORY FEES
(FEES REQUIRED AS A CONDITION OF ENROLLMENT AT THE COLLEGE)

1. CALIFORNIA RESIDENTS

Although (by definition) there is no "tuition" for California residents, there are still certain fees that residents are expected to pay as a condition of enrollment. These fees are:

- An enrollment fee ..... currently $18.00/ unit
- A health services fee
  Eureka Campus ..... $12.00/ semester, $7.00 summer session.
- Mendocino, Del Norte, Klamath-Trinity, and Arcata Sites, as well as students taking only off-campus classes ..... $4.00/ semester, $4.00 summer session.
- A small number of instructional materials fees (see individual course descriptions for details)

AN IMPORTANT NOTE ABOUT THE BOARD OF GOVERNORS GRANT

The **Board of Governors (BOG) Fee Waiver** is a program authorized by the California State Legislature. California residents who qualify for the BOG are not required to pay the enrollment fee or the health services fee. The qualifications are:

- The student must be a California resident; *and*
- The student must be receiving public assistance through General Assistance (GA) or General Relief (GR), AFDC/TANF/CalWORKs, Supplemental Security Income (SSI), or State Supplementary Income (SSI); *or*
- The student must meet the income standards set by the state; *or*
- The student must be eligible for state and/or federal financial aid based upon filing the Free Application for Federal Student Aid (FAFSA).

Students who wish to apply for a BOG should:

- Pick up a BOG application form from the Financial Aid Office or the Student Assistance Center, or fill out the one included in the current class schedule.
- Check with the Financial Aid Office to see if additional income tax information or agency verification will be required to process the application.
- Bring or mail the completed application and any additional verification information to the Financial Aid Office or the Student Assistance Center **before** registering for classes.

2. NON-RESIDENTS

Students who have not been legal residents of the state of California for at least one year immediately preceding the beginning of the term in which they wish to enroll will be required to pay non-resident tuition. At the time of this printing, the rates that non-residents will be expected to pay as a condition of enrollment are:

- Tuition ..... currently $177.00/unit
- An enrollment fee ..... currently $18.00/ unit
- A health services fee
  Eureka Campus ..... $12.00/ semester, $7.00 summer session.
  Mendocino, Del Norte, Klamath-Trinity, and Arcata Sites, as well as students taking only off-campus classes ..... $4.00/ semester, $4.00 summer session.
- A small number of instructional materials fees (see individual course descriptions for details)

A. NON-RESIDENTS PARTICIPATING IN THE OREGON EXCHANGE PROGRAM

The college has entered into agreements with three Oregon colleges to provide for a reciprocal exchange between institutions that are located in two different states but that are still geographically close to one another. The intent of this program is to be able to offer academic programs to students that may not be available at their own college. These colleges are:

- Oregon Institute of Technology
- Southern Oregon State University
- Rogue Community College

Students attending CR under the auspices of one of these agreements are obligated to pay the following fees:

- Tuition: an amount equal to 27% of the regular non-resident tuition, rounded to the nearest dollar. Currently $45.00/unit
- An enrollment fee ..... currently $18.00/unit
- A health services fee
  Eureka Campus ..... $12.00/ semester, $7.00 summer session.
  Mendocino, Del Norte, Klamath-Trinity, and Arcata Sites, as well as students taking only off-campus classes ..... $4.00/ semester, $4.00 summer session.
- A small number of instructional materials fees (see individual course descriptions for details)

HEALTH SERVICES FEE

A mandatory health services fee will be charged as indicated above.

The following waivers/exemptions to this fee are available:

1. Students who receive a Board of Governors Fee Waiver
2. Students who depend exclusively upon prayer for healing in accordance with the teachings of a bonafide religious sect, denomination, or organization.

Requests for this exemption are made by petition to the Student Assistance Center (Eureka campus) and/or to the Campus Vice President at the Del Norte or Mendocino Coast campuses.

*PLEASE NOTE: ALL FEES ARE SUBJECT TO CHANGE CURRENTLY $18/UNIT

OTHER FEES*

STUDENT ACTIVITY FEE

Students may choose to pay a student activity fee of $5.00 per term. This fee supports the Associated Students of College of the Redwoods (ASCR) social, educational, recreational, and athletic activities and programs on each campus.

PARKING FEES

Because the college is considered a tenant at the Klamath-Trinity and Arcata sites, parking at these locations is currently free of charge. Parking on the Eureka, Del Norte, and Mendocino campuses, however, is by permit only. Semester or annual permits may be purchased at each of these sites according to the following schedule:

Automobile/Truck:

Annual (August to August) Permit	$50.00
Fall or Spring Semester	$30.00
Winter Session	$6.00
Summer Session	$10.00
One-day Permit	$1.00

Motorcycles:*

Annual (August to August) Permit	$25.00
Fall or Spring Semester	$15.00
Winter Session	$3.00
Summer Session	$5.00
One-day Permit	$1.50

Available at vending machines located throughout the parking areas

*If an Automobile/Truck permit is purchased, and a motorcycle is the individual's second vehicle, a second permit will be issued at no additional charge.

Parking permit refunds will be issued prior to the established deadline of the term in which the permit was issued, provided the permit is presented to the Business Office at the time the request is made. Requests for refunds after the deadline must be based upon extenuating circumstances only.

PLEASE NOTE: Refunds are made only to the person who originally paid the fee.

TRANSCRIPT FEE

Both "official" and "unofficial" transcripts are available through the Student Assistance Center and at the Enrollment Services Offices on each campus. Students will be given two "official" transcripts free of charge. Each additional transcript costs $5.00; a "rush" transcript can be produced on demand at a cost of $10.00.

REFUNDS

FOR DROPPED CLASSES

Enrollment fees will only be refunded if the student drops the course(s) in question by the end of the 2nd week of the regular semester. See the Class Schedule for refund deadlines for Winter session and for Summer classes. Refund checks will automatically be mailed to eligible students. If a course is cancelled by the college, all enrollment fees will be refunded to the students who had registered and paid for it. If applicable, a refund processing fee of $10.00 per student per semester will be subtracted before the refund is issued.

Staff Photo

Students who receive federal financial aid are subject to federal refund calculation formulas. Contact the Financial Aid Office for detailed information.

The Oregon Exchange student refund policy follows the same time frames and other guidelines as those specified for California residents.

TO STUDENTS PAYING NON-RESIDENT TUITION

Refunds shall be made according to this schedule only after an official drop or withdrawal has been processed by the Enrollment Services Office.

Time of Official Withdrawal or Reduction in Load	Percent of Original Fee Refunded
Through the end of the second week of the term	100% of original fee
During third week of instruction	50% of original fee
During fourth week of instruction	25% of original fee

CONSEQUENCES OF NON-PAYMENT OF FINES OR OTHER FUNDS DUE TO THE COLLEGE

As a means of encouraging the payment of obligations to College of the Redwoods, its Foundation, and any offices thereof, the following blocks will be put in place until all debts are paid:

a. Grades will not be issued.
b. Transcripts will not be issued.
c. Registration will not be processed.
d. Degrees or certificates will not be awarded.

Upon presentation of valid receipt for the unpaid monies due to the College or any of its agencies, the restrictions shall be removed.

*PLEASE NOTE: ALL FEES ARE SUBJECT TO CHANGE CURRENTLY $18/UNIT

Financial Aid Programs and Services

Each year, over $8,000,000 in financial assistance is made available to students attending College of the Redwoods. These funds are provided from federal, state, and local programs.

Eligibility

Most forms of financial aid are available only to students who are enrolled in a course of study leading to a degree, certificate, or transfer to a four-year college or university.

Students who do not have a high school diploma or the equivalent (e.g. a GED certificate or qualifying score on the ATB exam), may not be eligible for federal financial aid at College of the Redwoods, but may be eligible for state and locally funded aid programs.

Estimated costs of attending CR during the 2004-05 academic year

Although College of the Redwoods charges relatively low fees, many students need assistance with the expenses related to attending college. The following is an estimate of the costs for 2004-2005:

	Student living with parents	Student living off-campus
Fees	$654	$ 654
Books & Supplies	1,224	1,224
Food & Housing	3,168	8,172
Transportation	828	936
Personal	2,286	2,286
Total	$8,160	$13,272

Non-resident students must pay an additional $177/unit for out-of-state tuition.

How To Apply For Financial Aid

Students must complete the Free Application for Federal Student Aid (FAFSA) and submit it for processing, following the instructions on the form. This application must be filed annually and students are encouraged to file the application online as soon after January 1 of each year as possible. For example, students should apply as soon after January 1, 2004 when applying for financial aid for the 2004-2005 school year.

Renewal applicants may apply for financial aid using the Renewal Free Application for Federal Student Aid (Renewal FAFSA) in place of the FAFSA form described above.

FAFSA on the Web (www.fafsa.ed.gov) is an Internet application developed by the U.S. Department of Education that students may use to complete an electronic Free Application for Federal Student Aid (FAFSA).

Using a supported web browser, students may complete and submit their FAFSA information directly to the Department of Education's Central Processing system (CPS). Electronic filing assistance is available in the Office of Financial Aid.

After transmitting an application over the Internet, students must mail their signed signature page to the Department, or sign electronically, using a USDE supplied PIN number. The CPS will determine their eligibility for financial aid within 72 hours after receiving the completed application.

Residents of California should also apply for a Cal Grant by completing the GPA Verification Form provided by the California Student Aid Commission. The deadline to apply for a Cal Grant is March 2 of each year. College of the Redwoods students who have completed 24 or more units will have their GPA submitted electronically by the Financial Aid Office.

A complete packet of College of the Redwoods financial aid information may be obtained by contacting the Financial Aid Office.

Application Deadlines

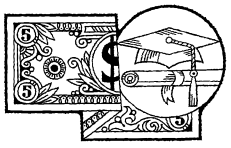
Students may apply for financial aid at any time during the school year, but it is recommended that students complete the application process prior to March 2 each year to assure full consideration for all programs. Some funds are very limited and run out well before the school year begins.

Refer to the chart on p. 17 or read the information below for more information on deadlines for specific programs.

How To Maintain Eligibility For Financial Aid

Students who receive financial aid must maintain satisfactory academic progress. This is a measure of the student's progress toward achieving a stated academic goal. It is measured both by grades and by percentage of classes completed. Students must complete at least 67% of units attempted, including classes dropped. Grades in completed classes must be a "C" average, or 2.0 G.P.A. Students may only receive federal aid for up to 1.5 times the published units to complete the course. Students who do not show progress are suspended from further aid. Copies of the Satisfactory Academic Progress requirements are available from the Financial Aid Office and on the CR Website.

Students may appeal a financial aid suspension by completing a petition form, available in the Financial Aid Office. Approved petitions will result in financial aid probation status and requirements for satisfactory probation may be more restrictive.



*Please Note: All Fees Are Subject To Change Currently $18/unit

SUMMARY OF COLLEGE OF THE REDWOODS FINANCIAL AID PROGRAMS AND ELIGIBILITY INFORMATION

PROGRAM	APPLICATION DEADLINE	FAFSA	SPECIAL APPLICATION	MAXIMUM AWARD AMOUNT
BOG Fee Waiver (California Residents Only)	Last Day of Term	Optional	Yes	Covers Registration & Health Fees
Federal Pell Grant	2 months before end of term	Yes	No	$4,050
Federal SEO Grant	*	Yes	No	$ 600
Cal Grant B and C Programs	March 2	Yes	Yes	Varies
Bureau of Indian Affairs or Tribal Grants	Varies	Yes	Yes	Varies
CARE Grants	Contact the EOPS Office directly at (707) 476-4270 for information on programs available and application procedures			
CR Scholarships	Contact Scholarship Office	Varies	Yes	Varies
Federal Work-Study	*	Yes	No	$4000
Federal Stafford Loan	1 month before end of term	Yes	Yes	Varies with year in college
PLUS Loan for Parents	1 month before end of term	Optional	Yes	Varies
CR Emergency Loans	Varies	No	Yes	Varies

* Funds are limited. We recommend that students apply as soon after January 1 as possible. Funds will be awarded until funding runs out.

Financial Aid, Veterans Programs & Scholarships

Financial Aid Programs Available at College of the Redwoods

• BOG (Board of Governors Fee Waiver)

This California state funded fee waiver program was established to assist California residents with the mandatory enrollment fee. Students enrolled in any number of units are eligible to apply. Students who are eligible for the BOG fee waiver are not required to pay the Student Health Fee. (For more specific information about this waiver, see p.14.)

To apply, students should complete the BOG application available at the Financial Aid Office, Student Assistance Center, EOPS, DSPS, or Enrollment Services Offices, or in the class schedule. The BOG application should be submitted to the Financial Aid Office prior to registering for classes.

Maximum award:
$18 per unit, per semester (the amount of the basic enrollment fee; no health fee will be charged).

• Federal Pell Grant

This program is a federally funded grant program which provides awards to undergraduate students. Students who have received a BA or BS degree are not eligible for this program.

To apply, students should complete the FAFSA form, listing College of the Redwoods (Federal School Code 001185). The processing center will send each student a Student Aid Report (SAR), which should be reviewed carefully for accuracy. If errors exist, the student should contact the Financial Aid Office for assistance. If additional information is necessary, the Financial Aid Office will contact the student.

Maximum award:
Awards range from $400 - $4,050 per year.
(Note: Award amounts are subject to change by Congressional action.)

• SEOG (Supplemental Educational Opportunity Grant)

This is a federal grant program. College of the Redwoods has a very limited amount of funding in this program, so students should apply early – by the priority application date (April 2, 2004) to be considered for this program.

To apply, students should complete the FAFSA, and any other forms which the Financial Aid Office sends to them after your FAFSA is processed.

Maximum award:
Awards range from $100 - $600 per year.

• Cal Grants

These grants are awarded by the California Student Aid Commission; only California residents are eligible. The Cal Grant B and Cal Grant C programs are available to students enrolled at College of the Redwoods. (The third Cal Grant program, Cal Grant A, is available only at four-year colleges and universities.)

To apply, new applicants should complete the Cal Grant GPA Verification Form and the FAFSA. Renewal applicants should complete the FAFSA. The completed FAFSA should be mailed to the Processor for processing no later than March 2, 2004.

Maximum award:
Awards range from $300 - $1,551 per year, depending upon state funding.

• BIA (Bureau of Indian Affairs) Grant

These grants are available to qualified Native American students through tribal or federal BIA funding.

To apply, students should contact the tribe or the BIA for application forms. In addition, the FASFA must be completed and filed.

Maximum award:
Awards vary per year, depending upon tribal and BIA resources as well as student costs.

• Federal Work-Study

This program provides on-campus jobs to students. Students can work until they have earned their entire award amount. College of the Redwoods has a very limited amount of funding in this program, so students should apply early to be considered for this program.

To apply, students should complete the FAFSA, the Financial Aid Information Form and any other documents sent by the Financial Aid Office after your FAFSA has been processed.

Maximum award:
Awards range from $500 - $4,000 per year; hourly wage rate is subject to change.

• Federal Stafford Loan

This is a low-interest student loan. This loan program should be considered only as a last resort after all other options have been considered. Information on interest rates and repayment plans is available from the Financial Aid Office.

To apply, students should complete the FAFSA, and any other documents sent by the Financial Aid Office after the FAFSA has been processed. If, after the notification of the financial aid award has been received, the student feels that s/he will need additional funding, the student can request a loan application packet from the Financial Aid Office. Before the loan application will be processed, applicants must attend a loan counseling session. A loan counseling session schedule can be obtained from the Financial Aid Office.

Maximum award:
The maximum annual loan for first year dependent* students is $2,625 per year; for second year dependent students, $3,500. Independent* students may be eligible for an additional $4,000 unsubsidized loan per year. Eligibility for the subsidized version of this loan is based on financial need.

• PLUS Loan for Parents

Federal PLUS loans are available to parents of undergraduate students. Loan limits vary with the cost of the student's educational program and the amount of other financial aid received. The interest rate is variable, but it is capped at 9.0 percent. A credit check is required.

To apply, students should contact the Financial Aid Office or a participating lender for an application form.

Maximum award:
Varies with cost and amount of other aid received.

*There are important distinctions between and definitions related to dependent and independent student status. Students should contact the Financial Aid Office if they have any questions about whether they would be considered independent or dependent for financial aid purposes.

• Veterans' Services Office

The Veterans' staff assists eligible veterans and their dependents in applying for educational benefits through the Veterans' Administration. Eligibility and benefits vary according to date of enlistment, disability (if applicable), or whether the student applicant is a survivor or dependent of a veteran who was disabled or deceased while serving in the military.

For information and assistance in applying for benefits, contact the Financial Aid Office, or the nearest County Veterans' Service Office.

Scholarship Information Is Available In The Scholarship Office, AD104;
(707) 476-4191

Scholarships

In 2003, more than 190 scholarships totaling approximately $135,000 were awarded to CR students. Scholarship application forms and scholarship criteria are available year around in the Scholarship Office.

Scholarships are awarded at least once each year. The awards range from $100 to $2,000 and are presented to students at a Scholarship Celebration, hosted by the College of the Redwoods Foundation League in conjunction with the Scholarship Office. Donors, family and friends are invited to the Celebration to honor the students and their achievements.

There are also many scholarships outside the umbrella of College of the Redwoods. For additional information, please contact the Scholarship Office.

College of the Redwoods Scholarships

· Perpetual Scholarships

Duane Shawn Allen Jr. Memorial
Lt. Commander Curt Barkdull Memorial
Robert Becker Memorial
James H. & James R. Beacom
Michael Jack Beal Memorial
Floyd Bettiga Art Scholarship
Catherine Briggs Nursing
College of the Redwoods Alumni Association
Associated Students of College of the Redwoods
College of the Redwoods Corsair Club
College of the Redwoods Forestry & Natural Resources Club
College of the Redwoods Foundation General
College of the Redwoods General
College of the Redwoods Memorial
College of the Redwoods Nursing
College of the Redwoods Police Academy
College of the Redwoods Recycling
College of the Redwoods Residence Halls
George Dinsmore Memorial
Dr. Walter Dolfini Memorial
Erick A. Erickson Memorial
Dennis Gabbert Memorial
Sylvia Garvie Memorial
Lois Halls Memorial
Neil K. Hulbert & Ernest E. Walund Memorial
Verner W. Huntus Memorial
Angelo Intersimone
Will Kale Forestry
Dr. Norman E. Ladd Memorial
Ernest & Mildred Lanini Memorial
Sam Maloof "Woodworker"
John Richard Matney Memorial
Steve Mayes Memorial & Nicki Morris
Mel McLean
Kathleen McVey Memorial
Arthur Meyer Memorial
David & Lea Mills
Nelson and Young Memorial
Victoria Nicholson Memorial
Dorothy Pease Memorial
Thomas & Dorthea Pendergast Memorial
Pete Peterson Memorial
Dr. Eugene Portugal Memorial
Phyllis E. Poska Memorial
Douglas Quinn Memorial
Redwood Art Association
Douglas L. Reynolds Memorial
Molly D'Arcy Rogers Memorial
Rotary Club of Eureka
Cedric Sampson Memorial
Phil Sarboe Memorial
Glyndon & Ruth Smith
Marlen Smith Memorial
Norm & Maureen Sprankle
Veteran's Auxiliary Club
VFW District 21
Louis & Fern Weichselfelder
Ralph & Dan Westlund Memorial
Les & Ruth Woodriff
Eugene Wright Memorial

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· ANNUAL SCHOLARSHIPS

Mona L. Beaver Nursing Scholarship
Richard C. Beaver Memorial
California Medical Assistants Association, Redwood Chapter
Maude Teal Codoni, Jane Codoni Horn, Antionette Boies Codoni, & S. H. Paine Memorial
College of the Redwoods Early Childhood Education
College of the Redwoods Foundation League
College of the Redwoods Foundation League — Judge Donald Wilkinson
College of the Redwoods Foundation League 10th Year
College of the Redwoods Foundation League President's Award
Eureka Arts & Cultural Commission
Eureka Sequoia Garden Club
Fortuna Garden Club
Fraternal Order of Lumbermen (Humboldt Hoo Hoo Club)
Humboldt Builder's Exchange, Inc.9
Humboldt District Garden Club
Dr. & Mrs. Ingebritson/Humboldt Area Foundation
James & Rebecca Jensen — Loleta IOOF Scholarship
Ian Johnson Memorial
Northcoast Employers Advisory Council
Patrick's Point Garden Club
President's Award for Outstanding Scholars
Quota Club of Eureka
Sonja Roseth
Rynearson Forestry
Scotia Volunteer Fire Department
Dr. D. D. & Mrs. Weichert Family Endowed Scholarship
Catherine Wilson Lewis

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RECYCLING

STUDENTS - LET'S TALK SCHOLARSHIPS & CAMPUS ENVIRONMENT!

The CR RECYCLING COMMITTEE needs your help to collect all recyclables. The money collected for all recycled items goes directly into the Recycling Scholarship fund for students!

Be a part of the effort to keep recyclables from the waste stream. Help save the environment and maintain the beauty of our campus!

Be a contributor to the scholarship fund and toss your cans, bottles, junk paper/office paper and white paper in a recycling bin located outside buildings, next to copiers or division office collection stations.

For more information call the CR WASTE MANAGEMENT COMMITTEE: 476-4383

REUSE
REDUCE
RECYCLE

CR: CHANGING STUDENTS' LIVES

Sometimes one interested person is all it takes to turn a life around.

A high school dropout and single mother by the time she was 17, Sage Matthews's life was lacking in clear educational or career goals until a College of the Redwoods professor recognized her potential.

Three years ago, Matthews, 26, was enrolled in CR English Professor Pat McCutcheon's English 1A (writing composition) class and doing well. One day, Matthews said, "McCutcheon prompted me to apply for the CR Honors Program. That turned me around, to see that someone believed in me."

"I didn't value myself in that way. Pat gave me the strength to get better as a student."

Matthews needed to be strong to overcome her circumstances and excel at CR. The insecurity of a broken home contributed to her dropping out of high school before the end of her sophomore year. She took a few classes in early childhood education at Fresno City College and then spent a few years traveling the West Coast and living with friends.

She gave birth to her son, Kaya, when she was 17 and took some more classes at Fresno City College.

"I was working as a waitress, but I knew it wouldn't get me anywhere," Matthews said. "I didn't have any long-term goals, but I knew I liked being educated. I was soul searching."

She fell in love with a man and followed him to Humboldt County. She took a semester's worth of classes at CR, including McCutcheon's Women in Literature course. But she had to drop out the next semester when her son was having behavioral problems at his school. (Eventually, it was determined that he had Attention Deficit Hyperactivity Disorder) After a year's break, she returned to college.

That first semester back she took McCutcheon's English 1A class and was inspired. In three years at CR, Matthews has achieved straight A's as an Honors Program student. In 2002 she was inducted into Phi Theta Kappa, the national two-year college honors society. In spring 2003, she received the highest scholarship available at CR, the $2,000 President's Scholarship.

She excelled in math to the point where she considered majoring in it when she transferred to a four-year college. But then she asked herself: "What really inspires me? I wanted to find something I would like to do when I wake up in the morning."

Her answer? Fashion design. Inspired by her mother's sewing hobby, Matthews took a sewing class when she was 10. She has been sewing and making clothes sketches ever since. In March 2004, she was notified that she'd been accepted at the California College of Arts in San Francisco, one of the finest art and design schools on the West Coast.

In June 2004, Matthews was set to receive two degrees, one an Associate of Arts degree in transfer studies and the other an AA degree in humanities.

"CR is a community to me and I've had so many great instructors who have been influential in my life," she said. "Going to College of the Redwoods gave me the opportunity to make a positive decision for the direction of my life."

"I have benefited tremendously by my experience at College of the Redwoods. I have gone from being a young single mother who didn't have a high school degree to a student who has excelled. I am graduating with two associate of arts degrees this semester ... This fall I will be attending one of the top 10 art schools in the country to pursue my bachelor of fine arts degree. College of the Redwoods made all of this possible, especially the courage I needed to believe that I could achieve it."

Sage Matthews

CR student and art teaching assistant Sage Matthews painted this fiberglass sculpture to send to Sacramento as her part in the "Missing Community College Student" statewide lobbying effort.

Photo's: Paul DeMark

Photo: Paul DeMark

Student Learning Support Services

Photo: Jack Hackmann

At College of the Redwoods we believe that learning occurs not only in our classrooms, but that it also takes place in a wide variety of locations and environments.

On each CR campus there are a multitude of resources available to enhance and support classroom activity. The Learning Resource Center houses the CR Library, tutorial services, testing and assessment services, a distance learning classroom, and learning labs for math and English students. Counseling, advising, and career services are available for students who may need some assistance selecting their classes or determining their educational or vocational interests and goals. Disabled Students Programs and Services offer support and encouragement to students needing different kinds of accommodations or mobility services. The Associated Students, intercollegiate athletics, clubs and honor societies, residence halls and work-study employment all provide students with new challenges, insights, and perspectives and often require them to learn and apply new information and/or master new skills.

Off campus, internships with local businesses, employment, and community service opportunities can give expanded meaning to lecture material and to theoretical concepts discussed in classes.

Using the college's many services and taking advantage of a wide variety of learning opportunities from the very beginning of one's college career can greatly enhance student success. The pages that follow give an overview of the different kinds of services that are available, in hopes that CR will provide each new and returning student with an "...education that works".

CR ... your community college ... changing lives for 40 years!

STUDENT SUPPORT SERVICES AND CAMPUS ACTIVITIES

Below is a listing of the many student learning support services and activities that are available throughout the Redwoods Community College District. But because the District offers classes and services in five different geographic locations, it is difficult to describe to the reader where each is located or how students and the public might contact them by telephone. We have therefore consciously decided NOT to give location and telephone information about these services in the section that follows. Office hours will vary from site to site. Please call ahead to avoid disappointment or inconvenience.

ACADEMIC COUNSELING AND ADVISING

The Counseling and Advising Center has been designed to help students attain their educational goals by offering the following services:

- **Academic Advising**. The staff in this office help students plan their term-by-term course schedules, establish their educational goals and choose their academic programs, meet general education requirements, transfer to 4-year colleges or universities and understand graduation requirements and the graduation petition process.
- **Educational Planning**. The counseling staff guides students through the development of Student Education Plans (SEP's), which serve as roadmaps for students seeking CR degrees or certificates. Each student's educational plan is individualized, so that it takes into account his/her individual needs, strengths, preparation, and outside commitments while making sure that both required and elective courses are completed in a timely manner.
- **Academic Problem Solving**. Advisors and counselors are trained to help students develop the strategies they may need to overcome obstacles that threaten to block the attainment of their academic/educational goals.
- **Referrals**. The counseling and advising staff are skilled at making quality referrals to other departments, services and agencies if they are not in a position to meet all of the needs of the student.

THE STUDENT ASSISTANCE CENTER (SAC)

On the Del Norte and Mendocino campuses, and at the Klamath-Trinity and Arcata Instructional Sites, the services listed as part of the Student Assistance Center can be obtained in the general administrative offices or at the Enrollment Services window.

On the Eureka campus, a wide variety of services and information are available at the Student Assistance Center. This is a great place to find out more about all aspects of the college. It's a visitor- and student-friendly place that is designed to accomplish the following goals:

- Serve as a primary intake point for student questions and concerns about the college and the wide range of services it offers to enhance student success;
- Provide students (and others) with high-quality, accurate information about all student-serving programs on the Eureka campus, as well as information about other services offered elsewhere by the District;
- Provide basic forms and perform basic functions related to student enrollment, matriculation, and progress through the institution;
- Make student appointments for personalized referrals to specific staff members for students requiring more information or assistance than that which can be provided at the Center;
- Provide feedback to the college regarding institutional barriers to student success, identify factors that might affect student satisfaction with their experience.

At the Student Assistance Center, students can pick up a class schedule or college catalog, register for classes, find out more about the college, ask directions, take a campus tour, or inquire about financial aid or campus organizations; the staff of the center stand ready to assist in every way possible. During the regular semester, the center is open a bit beyond normal business hours each week in order to accommodate the needs of our students and the public. Please be sure to call before making a trip to the campus though, to be sure someone will be available to provide the assistance you need.

ASSOCIATED STUDENTS, COLLEGE OF THE REDWOODS (ASCR)

The opportunity for self-governance is extended to the students of College of the Redwoods by the Board of Trustees and the Administration of the College. This is done to promote student activities which stimulate the intellectual, physical, social, and ethical development of students and to provide expanded educational opportunities and social life on campus.

On all three campuses in the district, the Associated Students of College of the Redwoods (ASCR) conduct activities which are an integral part of college life. The ASCR sponsors clubs, special events, social activities, music and drama events, student publications, and student government. The business of the ASCR is carried on by officers elected each spring semester as determined by the ASCR constitution and Board policy.

Membership in ASCR carries with it certain rights including participation in student organizations and reduced admission to all ASCR-sponsored activities and home athletic events. By popular vote of the first student body, cardinal and gold were chosen as the college colors and the teams are known as the Corsairs. The ASCR locations within the district are listed in the Directories at the back of this catalog.

To participate as an officer in student government, a student must be carrying six or more units, have a 2.0 grade point average for all previous college work attempted, and possess a valid membership sticker.

Clubs and Organizations

Social, educational, honorary, service, and special interest clubs are organized by students at each campus to contribute to the overall life of the college and to provide a variety of opportunities for social interaction and the exchange of ideas among CR students. Students should call the ASCR offices for more information and a list of clubs that are active at each location.

Career Development and Student Employment Center

The Career Development and Student Employment Center on the Eureka campus provides assistance to students and community members by making available a variety of career search, planning and development materials, services, and workshops. It also serves as the campus hub for student employment. Career services include career interest inventories, resume writing assistance, career planning course (Guidance 8), and job search skills. Student employment services include listings/referrals for local and on-campus job openings, federal work-study assistance, and on-line job listings.

Similar career services are available at the Mendocino Coast and Del Norte campuses. Contact the Financial Aid Offices at those locations for more information and assistance.

Disabled Students Programs and Services (DSPS)

The primary function of the Disabled Students Programs and Services Office (DSPS) is to accommodate disabling conditions and empower individuals to successfully participate in the educational experience at College of the Redwoods. For this reason, individuals with identified disabilities are regarded as students first and foremost.

- **Program goals**
  To assist individual students in the development of a realistic self-concept; to assist in the development of educational interests and pursuit of employment goals; and to provide the advice, counseling, and equipment necessary to facilitate success (including specialized assistance in the registration process).

  The program provides services to students who may have the following disabilities: impairments of mobility, vision, hearing, and communication; acquired brain injury; developmentally delayed; learning disabilities; and psychological disabilities.

- **Supplementary services include:**
  Priority registration; note-takers; interpreters and readers; test proctoring; remedial courses; mobility assistance; learning disability program; adaptive P.E.; high-tech center; art classes; and temporary medical parking as appropriate for each student with a disability.

- **Special equipment includes:**
  Book carts, tape recorders, four-track recorders, TTY (telephone for the deaf), CCTV's, and assistive listening devices.

- **Special assistance services include:**
  Liaison with faculty, counseling/advising, referral to community services, orientation to campus, and facilitation of writing of Work Requests to improve building access.

Staff Photo

Adaptive physical education facility.

- **Adaptive physical education**
  Adaptive PE is a program providing students with physical disabilities direct participation and individual growth in classes designed for lifestyle fitness. The program includes avenues for physical, mental, emotional, and social growth, with an end result in positive attitudes plus motivation toward physical activity. Services include physical fitness assessment, with subsequent development of individualized exercise program, according to each student's unique needs. Classes are listed under Physical Education, Adaptive.

- **The LIGHT Center**
  The LIGHT (Learning Integrating Guidance and High Tech) Center provides learning disabilities assessment and individualized instructional support for students with disabilities. Assessments are completed by Learning Disability Specialists who, based on a student's learning profile, make educational recommendations for accommodations. Adaptive strategies course components may include individualized instructional support services, study group involvement, skill building enhancements in the areas of study, note-taking and test-taking skills.

Photo: Bosha Struve

The High Tech Center

- **The High Tech Center**
  The High Tech Center, located in the Learning Resource Center, provides specialized computer assisted instruction for students with disabilities. Students are provided individualized and small group instruction in the use of adapted hardware and software such as: print readers, speech-activated software, and screen readers and magnifiers.

The staff of the DSPS program stand ready to support and develop the abilities of all students.

Enrollment Services

The Enrollment Services Office provides information and services related to initial enrollment registration, fees, student records, petitions, dropping and adding classes, transcripts, graduation, and degree evaluations.

EOPS/CARE

Extended Opportunity Program and Services (EOPS) & Cooperative Agencies Resources for Education (CARE)

The EOPS and CARE programs are state funded services intended to assist eligible students in the achievement of their educational goals.

EOPS services include the following:

- **EOPS book vouchers**. Students who qualify may receive assistance for the purchase of books through the book voucher program. Book vouchers are intended to *assist*, not replace financial aid.
- **Workshops**. Workshops are given throughout the semester to provide assistance in a variety of areas, including self-esteem, goal setting, and financial aid application.
- **Orientation**. A special EOPS orientation is provided once a semester to acquaint students with EOPS services and eligibility, as well as an opportunity to meet faculty and staff.

To receive EOPS services, students must complete a Special Programs Application available at the Counseling and Advising Center. Students will also be required to file a FAFSA (federal form) and BOG (Board of Governors) fee waiver. These financial aid forms are available at the Financial Aid Office and the Student Assistance Center.

CARE services provides assistance to single parents attending college full-time and who are receiving Cash Aid (AFDC) for themselves or their children. In addition to the EOPS services listed above, CARE students may also receive child care and transportation grant assistance.

Eligibility is determined based on the information submitted on the Special Programs application, the BOG fee waiver and federal financial aid form. For more information, please stop by the Counseling and Advising Office, located in the Administration Building.

Financial Aid

Please see pages 16-20.

General Education Development (GED)

GED testing is available through the Academic Support Center. GED test preparation classes are offered through local Adult Education Centers and the Private Industry Council (PIC).

On-Campus Housing: Eureka Campus

The residence halls on the Eureka campus provide a collegiate residential living opportunity for students coming both from within and outside the district. As one of only 11 California community colleges to provide this housing alternative for its students, CR is truly unique. Students who would like to live away from home in a small, friendly community should seriously consider this option, since it offers both social and recreational opportunities for those who live there. Students who are interested in academic achievement and campus leadership, and who would like to meet new people from a variety of backgrounds and cultures are encouraged to apply.

Rooms are designed to accommodate two students per room and two rooms (four students) share a bathroom. Each room is furnished with the necessary furniture for two people, but students must provide their own bedding and linens. Cost includes the room, electricity, water, and garbage service. While the basic outlets are provided, cable TV, phone, and internet access charges are extra and are paid directly to the providers by the students signing up for the service(s). A mandatory meal plan provides students with nutritious meals served in the Student Union/Cafeteria.

(continued)

Photo: Bosha Struve

On campus living at College of the Redwoods residence halls.

The residence halls have on-site laundry facilities, a computer lab, and a game room. The hall staff arrange for giving residents scheduled after-hours access to the gym, pool, and field house, and residents can attend many on-campus CR events for free.

The halls have a full-time Director as well as a full-time professional Assistant Director who lives in the halls year-round. There are also five well-trained undergraduate Resident Assistants, so there is always someone available to talk to and to help find solutions if problems arise.

Because College of the Redwoods places a high value on academic diligence, students wishing to live in the halls must have a 2.5 (or higher) G.P.A. from high school or from any previous college attended. Some exceptions may be made to this general rule-of-thumb, but students seeking such an exemption will have to provide additional information about their particular circumstances when they submit their initial application to the halls. The college is also committed to having a diverse residence hall community, so invites students from all backgrounds and cultures to apply.

Students who wish to apply for housing may go on-line to www.redwoods.edu then click on "Eureka" and then "Student Housing" to find the housing application, license agreement, meal plan information, and more details on residential living at CR.

Special Programs to Support and Encourage Academic Success

- **CalWORKs** This state-funded program is designed to provide support services to students receiving *cash aid* (AFDC) from the Department of Social Services. Services include child care assistance and advocacy.

Student Health Center (Eureka Campus)

Students attending classes on the Eureka campus are assessed a special fee to fund the operations of a Student Health Center. This program is housed in the Physical Education Building, in offices adjacent to the main gymnasium. CR's Student Health Center is staffed by a Registered Nurse Practitioner five days a week, on a part-time basis. The Center provides minor medical care for illnesses and injuries, health promotion education, immunizations and testing, as well as examinations required for specific vocational training programs. Local community clinics are available for acute care while local hospitals are used for emergency care.

Transfer Center

The Transfer Center provides information and assistance for students intending to transfer to a four-year college or university. The Transfer Center is designed to reduce obstacles to the transfer process by providing information on college and university application deadlines, requirements, and other issues of importance. The Center also sponsors "Instant Admissions" activities, college fairs, and applications workshops: anything that will help CR students understand that transfer to a four-year college or university is a process, not an event. Services and information are available on a walk-in basis.

Transfer services are provided through the Counseling and Advising Offices at all campuses.

California Student Opportunity and Access Program (CalSOAP)

Established in 1995, the purpose of the Northcoast CalSOAP Consortium is to increase the number of local students who attend college and training programs once they finish high school. The intersegmental Consortium includes College of the Redwoods, Humboldt State University, local school districts, and community organizations. By combining resources, the Consortium coordinates local college outreach efforts. Eligible families receive information, and high school students receive academic support to help them better prepare for post-secondary education.

The Consortium also provides services directly to students at the high schools throughout the CR service area. These services are called the *College Knowledge* program. Qualified college students are hired to be College Knowledge advisors and tutors to local students. This project is funded jointly by Consortium members and the California Student Aid Commission.

Upward Bound

The College of the Redwoods Upward Bound Program is designed to prepare future students to succeed in college. The program focuses on students whose parents have not had the opportunity to go to college and students who may need assistance in securing the financial resources necessary to pay their college expenses. The program provides supplemental instruction and academic advising at the students' high schools during the academic year and the opportunity to participate in an on-campus, residential program in the summer. Students are eligible to apply in the eighth grade.

Academic Support Center (ASC)

[Eureka Campus]

Under the auspices of the Academic Support Center, learning support services intended to enhance student success are offered at all instructional locations. At Del Norte and on the Mendocino Coast, these services may be found in the campus Library. On the Eureka campus, the Academic Support Center is located next to the library area inside the Learning Resource Center. All locations offer free instructional support services in a variety of forms: individual and small group tutoring, instruction services, referrals, access to multiple computer stations, DSPS and make-up testing, English and math skills evaluation, media viewing, private study areas, and the Writing Center. The Academic Support Center welcomes all students, faculty, and staff. Below is more information about the core services offered by the Academic Support Center.

Tutoring Services

The ASC provides free tutoring in content-area courses and learning/study strategies for individuals and small groups. Senior instructional assistants and trained peer tutors are available by drop-in and/or appointment.

Testing and Assessment Services

The ASC offers a variety of testing/assessment services to support classroom instruction and serve the public at large. All examinations given by the Center must be authorized by the instructor and all students taking exams must have a valid picture ID, such as a government-issued ID, state ID, driver's license, or College of the Redwoods ID card.

Services for the college include:

- Math and English Skills Evaluations
- Testing for DSPS students with verified accommodations, including final examinations
- Make-up Exams
- Finals Week Exams
- English Competency Exam Make-Ups
- Distance Education Exams

Services to the public include:

- GED Testing
- Ability to Benefit (ATB) Testing
- Out-of-District Exams

The Writing Center

The Writing Center provides students with expert tutorial assistance from CR English instructors and trained peer tutors.

- Students who are enrolled in an English class or lab may drop-in or make an appointment to discuss their writing at any stage in the composing process.
- Computers and printers are available for student use while working on assignments and essays.
- While in the Writing Center students may also use the Internet for educational purposes. There may be a nominal fee for printing.

In addition, the Writing Center offers a private study area for students who wish to work on English assignments.

Instruction Services

The ASC has a selection of handouts for students on essay writing, speech preparation, grammar, punctuation, MLA and APA documentation, résumé writing, and learning, study, and test-taking strategies, among others. Throughout the academic year, the ASC offers scheduled workshops on similar topics. Instructors who wish to have ASC staff provide tours of the facility or in-class workshops should contact the Director to set up an appointment.

Student Referral Services

Instructors, academic counselors, or advisors who have identified students as requiring additional help in their coursework, are encouraged to refer those students to the ASC for assistance. Similarly, instructors who have identified students as academically advanced and interpersonally mature are encouraged to recommend those students to the ASC as potential peer tutors.

Computer Access

The ASC has a number of computer stations with Internet capabilities, all of which are connected to laser printers. Students may use word processing programs, make spreadsheets, or create PowerPoint presentations using Microsoft XP software. Computer-assisted programs are already available for some disciplines, and instructors may contact the ASC if they wish to develop or purchase additional software. There may be a nominal fee for printing.

Media Services

The ASC offers space where students may listen to or view instructional media materials. Reserve materials, such as audio or videotapes, CDs, and DVDs, are indexed in the Library's computer catalog and must be checked out at the Library Circulation Desk. Students are encouraged to stop by the ASC and use the available equipment.

Photo: Bosha Struve

The ASC Writing Center located in the Learning Resource Center.

Room Reservation Services

The ASC has five small rooms in which individuals or small groups may meet and/or study for a limited period of time. Although students must reserve most of the rooms in advance, one room is especially designated for drop-ins and is available on a first-come, first-served basis.

Bookstore [Eureka]

The College of the Redwoods Bookstore (Eureka campus) carries all textbooks and supplemental course materials, as required by the college faculty. In addition, the store has a large selection of general books, school supplies, CR logo clothing and gift items, academically priced computer software, and other general merchandise. The Bookstore offers many services to the campus community including a fax service, self-service copies, stamps and mail service, and special orders. The Bookstore also conducts a textbook buy-back during finals week of fall and spring semesters. The Bookstore is located next to the cafeteria. The hours during fall and spring semesters are Monday-Thursday 8:00 a.m. to 7:00 p.m. and Friday 8:00 a.m. to 4:00 p.m. The phone number is 476-4130.

Bookstore services are provided at the Arcata Instructional site and Del Norte, Mendocino, and Klamath-Trinity locations at the beginning of each semester.

Child Development Center [Eureka]

On-campus child care is available at College of the Redwoods (Eureka Campus) Child Development Center for children age three months through kindergarten enrollment age. The CDC provides a play-based, developmentally appropriate curriculum for children.

Free child care is available for children from income eligible families and CalWORKs recipients. To receive these services the family must demonstrate a need for child care. (State preschool requires a minimum of 6 ½ hours of enrollment per day starting by 9:00 a.m.)

When space is available, fee-paying parents may enroll their children at the CDC. Parents pay a daily rate based on the hours of care required and the age of the child. CR students, staff, and faculty have priority for these openings.

The CDC is open all instructional days. Breakfast, lunch and an afternoon snack are served to all children at no cost. Drop-in child care is not available.

Parents are urged to visit the CDC with their child. Registration materials are available at the Child Development Center, located on the east side of the campus, by the Field House. See page 33 for more information about the CDC.

Community Education

See page 49 for information about Community Ed.

Cooperative Education Program

Cooperative Education is an instructional program that is designed to complement the student's academic training with realistic on-the-job experiences. The program emphasizes increasing occupational skills, acquiring desirable work habits, developing healthy work attitudes, and broadening the understanding of working conditions.

Cooperative Education is available to all divisions at College of the Redwoods. A list of the course offerings may be found in the class schedule.

Photo: Bosha Struve

The College of the Redwoods Bookstore at the Eureka campus.

Creative Arts Gallery [Eureka]

Students, faculty, and the general public are encouraged to visit the College Gallery located in the Creative Arts complex. Our gallery program offers a wide variety of exhibitions by locally and nationally recognized artists. The exhibits are professionally curated and prepared by our art faculty, with occasional guest curators contributing as well. Most shows in the main gallery are organized with a teaching function in mind, and feature artworks that exemplify concepts and techniques also presented in our courses. Additionally, featured artists often give a gallery talk or slide show to students in conjunction with their exhibition.

We also feature an annual juried student show each spring, where selected students can exhibit their most accomplished work, and even receive awards. Our gallery committee selects a locally recognized artist as student show juror each year.

Room two of the Creative Arts Gallery features a permanent exhibit of the college's acclaimed Native American art collection. Ceremonial hats, baskets, and other traditional regalia from major northcoast tribes are displayed in a unique sculptural installation that is sensitive to their original context. Access to this special gallery is available during regular gallery hours or by appointment.

The campus and community are invited to enjoy the works and meet the artists at opening receptions for each gallery exhibit. Sales are also encouraged, with a commissioned percentage used to further gallery programs. Contact the gallery for further information including reservations for tours of exhibits.

Creative Arts Music Library [Eureka]

Located on the second floor of the Creative Arts Building, the Creative Arts Music Library provides music listening facilities for students and staff of the college.

To support the music curriculum, we maintain a collection of phono-records and scores for circulation. There is also a collection of audio-cassettes which may be used for library listening. The collection includes classical, jazz, popular and ethnic music.

The Music Library also makes high speed copies of audio-cassettes onto blank cassettes for students who are currently enrolled in music courses that have a listening requirement. The College strictly observes the Copyright Law (Title 17, USC) of the United States.

Dental Health Center [Eureka]

The College of the Redwoods Dental Health Center is open on Mondays and Wednesdays during the fall and spring semester. Appointments must be made in advance. Dental care is provided by local dentists and students in the College of the Redwoods Registered Dental Assisting Program.

We select patients who are low income and we are not able to accept patients who have dental insurance or a Medi-Cal card. While our fees are low, service is rendered on a cash basis only. The office will let you know the total amount due at your next visit.

For further information regarding dental services provided or to schedule an appointment, please call the dental office. The office is located in the Applied Technology Building.

Photo: Paul DeMark

The College of the Redwoods Dental Health Center.

Dining Service

A traditional college food service facility serving Eureka campus faculty, staff, students and visitors is located in the Student Union, right next to the Bookstore at the center of the campus. A variety of menu items are available including homemade entrees, a delicatessen/sandwich bar, pizza, burgers, a salad bar, specialty coffees and drinks, ethnic food specialties, and breakfast items. During the semester, food service is available Monday through Friday from 7:30 a.m. through 6:00 p.m., with limited service on the weekends. Meal plans are mandatory for students living in the residence halls.

On the Del Norte campus, students and the administration work together to staff and operate a small snack shop. This area has vending machines and an espresso machine providing specialty coffees for students, faculty, and staff. Breakfast pastries, breads, and other packaged goods are also available for purchase.

The Mendocino Coast campus provides limited food services and a place for students to eat and meet at "The Grind": a student-managed store serving pastries, cold sandwiches, coffees, soft drinks and prepared foods that can be heated in the microwave. The Grind is the only place in the district that can boast indoor seating with an ocean view! This area is also a place where students, faculty, and staff gather to study and relax with one another between classes and during the lunch hour.

Photo: John Anderson

Distance Education classroom in the new LRC.

Distance Learning Classes

The Distance Learning Program is an alternative method of delivery designed to reach those students who find it difficult to attend classes on campus. Students may earn college credit through a flexible timetable adapted to their individual time constraints. These classes are offered through a variety of formats: interactive teleconferencing, interactive televised classes, and telecourses. Assignments are given to instructors by mail, E-mail or by FAX.

Distance learning courses are academically equivalent to on-campus classes. Students must satisfy prerequisites and may be required to attend class on limited, set dates as designated by each instructor. Students considering enrolling as distance learners need to be mature and self-motivated. The instructors at College of the Redwoods will maintain regular correspondence with the distance learner but success ultimately depends on the independence and time management skills of the student.

The classes offered as part of the distance learning program are listed in the class schedule and may be found under each department heading. All distance learning classes are also grouped together in one section of the schedule. Mandatory attendance requirements will be listed. Students must meet these requirements.

Students register for their distance learning classes during the regular registration period and follow the regular registration procedures.

Distance learning classes provide opportunities for life-long learning. If you are an independent, organized, motivated student and have problems attending on-campus classes, you may want to consider a distance learning class.

Honors Program Core Curriculum

The Honors Core Curriculum is a coherent, rigorous program offering freshman and sophomore students a college education second to none.

Some of our most distinguished faculty have designed a special two-year course of study that will apply to General Education transfer requirements at any university and provide advanced academic preparation not possible in traditionally structured classes. It offers these and other significant opportunities to motivated college students:

1. In classes of limited size to insure individual attention between student and teacher, honors students take special sections of regular courses taught by inspiring instructors in an environment of lively interaction among other students who seek intellectual challenge.
2. Unique courses and co-curricular activities are offered to honors students to prepare them for transfer to top colleges and universities.
3. Unique benefits are available to students who complete 15 or more units in honors. These transfer benefits at prestigious four-year universities range from guaranteed admission to scholarships.

The Honors Program at College of the Redwoods is truly a low-cost, high-quality alternative for your first two years of college work.

The Curriculum

These sections are designated in the class schedule as Honors with an (H). Enrollment is restricted to members of the Honors Program.

- **Enrollment and Scholarship Support**
  Enrollment in honors classes is limited to twenty students. Admission to the Honors Program will automatically confer a partial fee waiver. We encourage students to request application forms by writing to:

  Honors Program Coordinator
  College of the Redwoods
  7351 Tompkins Hill Road
  Eureka, CA 95501-9300

Photo: Sue Bearden

Photo of the CR Booth, at the 2003 Humboldt County Fair with Mj Goble (President, Rt.) and Patrick Cross (2nd VP).

Photo with Dr. Diqui LaPenta (Advisor, Lft.) and Charlotte Peters (Webmaster) with numerous awards was taken at the 2003 AGS State Spring Conference.

Alpha Gamma Sigma Honor Society Gamma Rho Chapter

College of the Redwoods chapter of Alpha Gamma Sigma, Incorporated (AGS); the California College Honor Scholarship Society, shall be known as the Gamma Rho Chapter.
The purpose of this organization is to:

1. foster, promote, maintain, and recognize scholarship among its members and other students.
2. develop programs offering cultural, social and enrichment activities as part of the total college experience.
3. promote service to the college and the community.

**Note: Any reference made to College of the Redwoods will be inclusive of Del Norte, Eureka, Klamath/Trinity, and Mendocino Campuses and all respective branches, which fall under the jurisdiction of the Redwoods District.*

Privileges and Honors

- Graduation with Honors: Permanent members who graduate are entitled to wear the AGS gold cords in addition to the CR honors cords.
- The Official Gold Seal: Permanent members shall be entitled to have the official gold seal embossed on their diplomas.
- The Official Certificate: Permanent members shall be entitled to receive the official certificate of the organization.
- The Official Pin:
  a) Any initial or continuing member shall be entitled to wear the officially adopted silver pin of the organization.
  b) Any permanent member shall be entitled to wear the officially adopted gold pin of the organization.
- Scholarships: All members shall be entitled to apply for AGS and Gamma Rho sponsored scholarships provided that the scholarship requirements are fulfilled.

Phi Theta Kappa - International Honor Society of the Two-Year College

To recognize and encourage scholarship, College of the Redwoods chartered the Beta Gamma Iota Chapter of Phi Theta Kappa in 1996. The chapter provides opportunities for the development of leadership and service, an intellectual climate for exchange of ideas and ideals, lively fellowship for scholars, and stimulation of interest in continued academic excellence.

The Benefits of Membership Include:

- Golden Phi Theta Kappa membership pin and diploma seal indicating Society membership
- Scholarship Directory listing all transfer scholarships exclusively for Society members
- Automatic enrollment in Phi Theta Kappa Transfer Database, which is made available to four-year and senior-level institutions that actively recruit transfer students.

Invitation to membership is extended by the chapter to students without advanced degrees who are enrolled at CR, have completed at least 12 hours of course work leading to an associate degree, and have a GPA of 3.5.

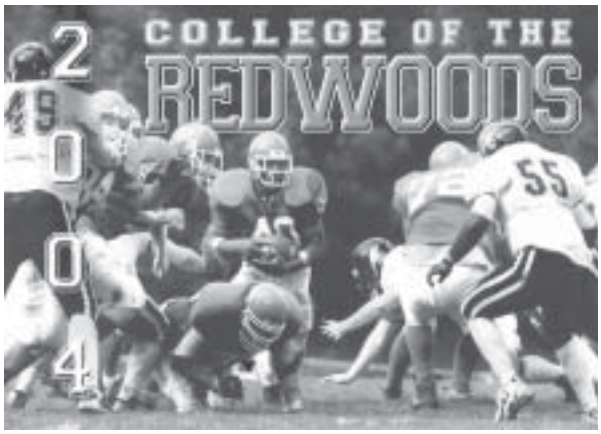


Photo: CR Physical Ed. Dept. & Bosha Struve

Intercollegiate Athletics [Eureka]

The College of the Redwoods **Corsairs** belong to the Golden Valley Conference, which also includes Butte College, Feather River College, Lassen College, Shasta College, and College of the Siskiyous. The Commission on Athletics (COA) governs all community college athletics in the state of California. College of the Redwoods participates in the following sports in the Golden Valley Conference:

Women ..... Basketball, Soccer, Softball, Volleyball
Men ..... Baseball, Basketball, Football

In football, the Corsairs are also members of the Mid-Empire Conference of the Northern California Football Alliance.

Photo: Comp. & Consulting Serv.

Photo: Bosha Struve

Library Services

College of the Redwoods district libraries are located at the Eureka campus, Del Norte campus, and at the Mendocino Coast campus. CR students, staff, faculty, and district residents may borrow materials from any of these libraries directly or via interlibrary loan. Library users may also request items held at other libraries within the North State Cooperative Library System.

Current hours of service are posted at each library and on the library web page. All CR libraries are open Monday through Friday; hours vary from site to site.

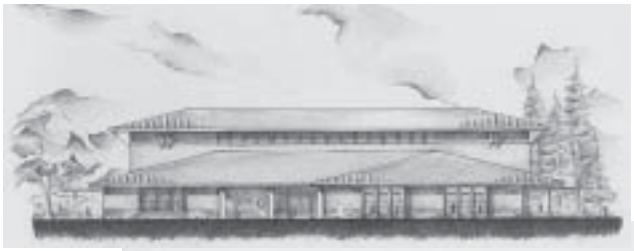
Library staff members are available to assist in searching for books, articles, or any other information. Reference services include research advice and assistance, individual instruction in the use of reference and research tools, including online and internet databases, general orientations, library instruction to classes, and telephone, e-mail, or other specialized instruction as needed.

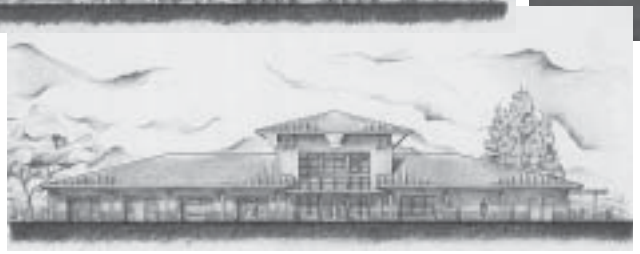
Library facilities are accessible to students with disabilities. The Eureka campus library has several adaptive computer workstations with software and hardware installed that helps to provide access to online and internet databases to students with visual or auditory handicaps.

Computers in the libraries provide access to the Internet for research purposes. Internet-accessible and CD-ROM databases provide indexing and subject access to full text articles from over 10,000 magazines, newspapers, and journals.

Library holdings include approximately 51,700 volumes in Eureka, 5,500 in Crescent City, and 8,000 in Fort Bragg. The district subscribes to approximately 100 magazines and newspapers in print form. Library collections include more than 670 audio cassettes, several thousand pamphlets and maps, over 1,000 video tapes, DVDs, and CD-ROMs. Library collections at all campuses can be searched via the Internet at: http://library.redwoods.edu.

CR's CDC - Child Development Center





An architect's drawings of the West elevation (top) and the South elevation (bottom) of the Child Development Center.

Photo: Bosha Struve

The completed Child Development Center.

THE CHILD DEVELOPMENT CENTER is an exciting addition to the Eureka campus and is a permanent site for many specialized programs as well as serving our students' child care needs. The new facility replaces a 4,000-square-foot, 30-year-old relocatable building, which was not designed for this purpose, and meets all the Guidelines of Title 22 and the Americans with Disabilities Act of 1990. The Center has several laboratory classrooms with observation areas, an inside covered multi-purpose room, a puppet theater as well as a complete food service facility and outdoor play areas for each age group.

Photo: Mark Larson

The main reception area, library, puppet theater & staff offices of the Child Development Center.

Photo's: Mark Larson

CDC Information

The College of the Redwoods Child Development Center simultaneously provides a high-quality laboratory setting for early childhood education students and an enriching full-day child care and development services for the children of CR's students, staff and faculty.

Play is "Education that Works"

Program Philosophy

At the College of the Redwoods Child Development Center we believe children are capable and competent. We are committed to children's potential and their enjoyment of life. The CDC develops children's disposition for curiosity, persistence, resourcefulness, problem solving and creativity. We are a community of learners where children and adults explore their world together.

Staffing

The teachers at the Child Development Center are early childhood education professionals with education, training and certificates in child development and experience in early childhood education programs.

In addition to the permanent staff, students from the early childhood education program work in the CDC to master the skills necessary to work effectively with young children.

College of the Redwoods offers an Associate of Science Degree in Early Childhood Education (ECE). For a complete description of the ECE program, visit the campus website at www.redwoods.edu.

To the left is an architectural rendering of the Learning Resource Center (LRC) which was completed in 2002 and now offers students a full range of academic support services.

Photo: Bosha Struve

CR's LRC - Learning Resource Center

Mission

To become the central educational resource for the Redwoods Community College District. The district stretches from the Oregon border south to the town of Elk in northwestern Mendocino County and east to western Trinity County.

To work as the information gateway, or "the server" for the CR District, linking the library and the Academic Support Center, with their array of media services into a single unit - administratively, physically and philosophically.

History

In 1987, College of the Redwoods submitted plans for the renovation of its existing library and requested funds from the state, which were tentatively approved. Soil samples determined, however, that the old Eureka campus library was too close to an earthquake fault line to be approved for the renovation.

A new LRC building and funding proposal was submitted to the state in 1992. It was approved in concept and funded when voters passed Proposition 1A in November 1998.

The Learning Resource Center

at College of the Redwoods opened with a full range of academic support services in October 2002. The 39,000-square-foot LRC combines a traditional and electronic library with 140 general-use computers, a distance education classroom capable of broadcasting classes over cable TV and to other CR campuses, an Academic Support Center, a Writing Center, and a High-Tech Center for students served by the college's Disabled Students Programs and Services. This facility provides a wide variety of tutorial and instructional support activities and media services to CR students and the surrounding communities. The LRC was conceived and designed to be a focal point of teaching and learning. This modern, integrated learning center enables the college to significantly enhance the learning opportunities it is committed to providing for the citizens of the North Coast.

Photo: Paul DeMark

College of the Redwoods President Casey Crabill, CR Trustees and North Coast political leaders broke ground on the college's Learning Resource Center building on the Eureka campus July 11, 2000.

Photo: Bosha Struve

The Learning Resource Center shines like a beacon in the early evening twilight.

Features Available in the LRC

The Library (15,312 square feet)

- "Hot Desks" with dial-out computer connections for students and faculty with laptops that have modems to access Internet service providers and e-mail.
- Six group-study rooms.
- Multipurpose room with seating for 30.
- Conference room with seating for 16-17.
- Student copy center.
- General book and periodical collections, reserve books, and inter-library and out-of-district library borrowing of learning materials.
- College archives and special collections.
- One hundred forty general-use computers with word processing and access to the Internet, the Library catalog, and the online database, with full-text articles from magazines and journals.

Photo: Bosha Struve

Photo: Bosha Struve

The Academic Support Center [ASC]

- Tutors are available via drop-in and by appointment.
- Test taking: make-up exams, Disabled Students Programs and Services' students with verified accommodations; English/math skills evaluations; distance-education testing; general education development (GED) and ATB (ability to benefit) testing.
- Workshops on essay writing, speech preparation and other instruction services.
- Five study rooms, by reservations and drop-in.
- Wall separating ASC and library area is translucent in order to facilitate natural lighting and provide a rare visual example of structural wiring for construction technology students.
- Media viewing and usage.
- Computers are available with Internet access, word processing, spreadsheet and PowerPoint software.

Photo: Bosha Struve

The Writing Center

- Assistance from English faculty and peer tutors.
- Copies of textbooks and reference books.
- Quiet study room.
- Forty-two computers with Internet access and word-processing programs.

Disabled Students Programs and Services

High-Tech Center

- Braille printer.
- Print reader.
- Speech-activated software.
- Screen readers and magnifiers.
- Small-group instruction in basic computer skills.
- Self-paced study programs in many subjects.
- Twelve computers.

Photo: John Anderson

Distance Education

- Video streaming - Students can simultaneously watch a previously taped distance-education class and key in their notes on computer screens.
- Broadcast and receive from Mendocino and Del Norte campuses and broadcast classes over local TV cable systems in Humboldt, Mendocino and Del Norte counties.
- Seating for 28 students.
- LCD projector and drop-down viewing screen.
- Four large monitors allow for viewing of Del Norte and Mendocino distance-education classrooms and display program material.
- Three cameras.
- Ten microphones in ceiling allow for student questions to be broadcast.
- Fax machine facilitates receiving materials/questions from campuses or TV cable system viewers.
- Satellite downlink makes it possible to receive feeds from off-campus broadcasts.
- Twenty-eight computers.

Academic Regulations

Catalog Rights

This term is used to define a specific set of academic requirements that are set forth in the college catalog. A student's catalog rights are established at the time of initial enrollment and represent the rules that are used to decide if and when that student has satisfied the requirements for the degree or certificate s/he is seeking. In order to retain one's original catalog rights, the student must remain in continuous attendance at CR from the time s/he enrolled initially.

When this continuous enrollment requirement is met, the student may choose to qualify for graduation in one of two ways:

a. by satisfying the requirements set forth in the college catalog at the time of initial enrollment; or
b. by satisfying the requirements set forth in the college catalog in force during the academic year in which the student is graduating.

If a student does not remain continuously enrolled at CR after initial enrollment, s/he is required to assume the catalog rights that are in force at the time of his/her reentry into the college. A student may have a one-semester break in enrollment and still retain his/her catalog rights. Courses taken during the summer or winter sessions do not satisfy the continuous enrollment requirement.

Open Courses

Unless specifically exempted by statute, every course, course section, or class at the College shall be fully open to enrollment and participation by any person who has qualified for enrollment at the college and who meets such prerequisites as may be established pursuant to Chapter II, Division 2, Part VI, Title 5 of the California Administrative Code, commencing with Section 51820.

Classification Of Students

Freshman: A student who has completed fewer than 30 units of college credit.

Sophomore: A student who has completed 30 or more units of college credit.

Post-Graduate: A student who has been awarded a degree and has enrolled for further study.

Full-Time: A student enrolled for 12 or more credit units.

Part Time: A student enrolled for fewer than 12 credit units.

The Meaning of the Course Numbering System

* 1-99..... Courses which may be applied to a Baccalaureate Degree or to an AA or AS degree
* 100-199 ..... AA/AS applicable courses

  200-299 ..... Non-credit Adult courses

  300-399 ..... Skill Development courses

* Success in some courses numbered 1-99 and 100-199 is dependent on skill levels in English and math that are equivalent to ENGL 150 and/or MATH 105/106. This is in addition to any other stated prerequisite for a course, in accordance with Title 5 of the Education Code. Check with a counselor or advisor if you have a question about the math and/or English requirements for a specific course.

Prerequisites, Corequisites and Recommended Preparation

Prerequisite

It is the intent of College of the Redwoods to guide students into classes in which they will have the greatest opportunity for academic success. Therefore, it is in the student's best interest to complete the prerequisite for a class in which he/she intends to enroll. Successfully completing the prerequisite [with a grade of "C" or better] greatly increases the probability of success.

A prerequisite is a course a student must take or preparation that a student must have before enrolling in another course. A prerequisite provides a student with a specific set of skills or knowledge without which s/he is unlikely to succeed in the next course. Students will not be permitted to enroll in courses and programs without meeting the appropriate prerequisites for them.
Example: completing Math 106 with a "C" grade or higher is a prerequisite for Math 120.

Early registration may pose problems for students currently enrolled in math and English courses. If students anticipate passing with a "C" or better, they should register for the next level course. Students anticipating earning a D or an F in the prerequisite course should get a form from their instructor recommending that they be allowed to repeat the course.

Students may enroll in any course for which they meet the necessary prerequisites. Failure to verify completion of the required prerequisite will cause the student to be dropped from the course and the related fees will be refunded. Verification of a stated prerequisite may be obtained in a variety of ways: completing the prerequisite at CR, completing an equivalent prerequisite at another college and/or obtaining appropriate placement results. If a student is not sure whether s/he has met a prerequisite, a counselor or advisor should be consulted before registration. This is even more important if s/he completed the prerequisite at another institution.

COREQUISITE

A corequisite is a course that students are required to take at the same time as another course. A corequisite provides a set of skills or a body of knowledge that must be acquired through concurrent enrollment in both courses. Without these skills the student is highly unlikely to succeed. If a course requires a "corequisite," the student must enroll in both courses at the same time.
Example: English 150 is a corequisite for English 150L.

RECOMMENDED PREPARATION

When there is a course or preparation that a student is advised (but not required) to have before or in conjunction with enrollment in a course, it is considered to be a class with "recommended preparation." Strongly recommended preparation represents a set of skills or a body of knowledge with which will help a student achieve a greater understanding of course material, but without which the student still may succeed in the course or program.
NOTE: Students enrolling in an English and/or math course through telephone registration must have completed the prerequisites for these courses or they may be dropped from them. English and math instructors will request verification from you on the first day of class.

REASONS FOR A PREREQUISITE CHALLENGE

To challenge a prerequisite requires written documentation and an explanation of the student's background or abilities that adequately prepare the student for the course. Challenge forms are available only through the Counseling and Advising Center. Prerequisites may be challenged for one or more of the following reasons:

1. The college has not developed the prerequisite according to its established procedures or has not developed the prerequisite in accordance with existing statutes.
2. The prerequisite is discriminatory or is being applied in a discriminatory fashion.
3. The college has not made the prerequisite course reasonably available.
4. The student has documented knowledge and abilities equivalent to those specified in the prerequisite course.

HOW TO INITIATE A PREREQUISITE CHALLENGE

1. Meet with a counselor or advisor to discuss reasons for the challenge.
2. Provide written documentation which clearly explains your reasons for challenging the prerequisite.
3. If challenging criteria #1, 2, or 3 (above), complete form, attach documentation, and file with the Vice President, Academic Affairs or the Campus Vice President at the Mendocino or Del Norte campuses.
4. If challenging under criteria #4 (above), complete the form with attached documentation, and file with appropriate Division Chair or the Campus Vice President at the Mendocino or Del Norte campuses.
5. The Division Chair, Campus Vice President, or Vice President will notify you within 10 working days whether your challenge is approved or denied.
6. If approved, you will be allowed to remain in the enrolled course; if denied, you will be dropped from the class.

EVALUATION OF CREDIT

CR accepts most lower division course work that students have completed at another accredited college. Any credit granted by College of the Redwoods is subject to re-evaluation by other colleges.

Religious studies courses that are doctrinal in nature are accepted from accredited institutions.

All credits will be evaluated in keeping with the guidelines established by "Catalog Rights" (see page 36).

CR does not grant credit for military service.

ADVANCED PLACEMENT CREDIT

College of the Redwoods encourages prospective students to prepare themselves for college by taking high school courses which are rigorous and challenging. Opportunities to take such courses are available through the Advanced Placement (AP) program of the College Entrance Examination Board. Students who have successfully completed courses in the Advanced Placement program with examination scores 3, 4, or 5 may earn up to 6 semester units of credit for each AP course. Advanced Placement credits may be used to satisfy specific AA/AS degree General Education requirements or may be applied as elective units toward the degree. However, when a student transfers to any other college or university, that institution routinely reevaluates advanced placement units in accordance with its own internal policies. Therefore, advanced placement units remain intact and do not transfer as College of the Redwoods courses. Further, advanced placement units may not be used to satisfy residency requirements.

Specific course credit is granted to students with qualifying Advanced Placement examination scores when it has been determined that Advanced Placement course work is equivalent to specific College of the Redwoods course work. When no CR equivalent of Advanced Placement course work exists, students will be granted six semester units in the subject area to apply as elective credit toward the degree.

To apply for Advanced Placement credit, students must be enrolled in, or have completed, at least 12 units at College of the Redwoods. Advanced Placement Program scores must be sent to the Enrollment Services Office for evaluation.

College of the Redwoods awards credit for Advanced Placement examination scores of 3, 4, or 5 (unless otherwise specified), as noted in the table on page 38:

AP Examination Awarded	Sem Units Score	Minimum with Elective Credit	Course Equivalency
Art History	6	3	Art 1A and 1B
Art Studio	6	3	Art 17 plus 3 units elective credit
Biology	6	3	Biol 1 or 10 plus 3 units elective credit
Chemistry	6	3	Chem 1A
	6	4	Chem 1A and 1B
Computer Science	6	3	CIS 1, 2, 11 or 12 plus 3 units of elective credit
Economics			
Macroeconomics	6	3	Econ 1 plus 3 units elective credit
Microeconomics	6	3	Econ 10 plus 3 units elective credit
English Language and Composition	3	3	Engl 1A
English Literature and Composition	6	3	Engl 1A plus 3 units elective credit
Foreign Language			
French	6	3	French 1A, 1B
French	6	5	French 1A, 1B, and 2A, 2B
German	6	3	Germ 1A, 1B
German	6	5	Germ 1A, 1B and 2A, 2B
Spanish	6	3	Span 1A, 1B
Spanish	6	5	Span 1A, 1B and 2A, 2B
Government	6	3	Polsci 10 plus 3 units elective credit
History			
American	6	3	Hist 8, 9
European	6	4	Hist 4, 5
Mathematics			
Calculus AB	6	3	Math 50A plus 2 units elective credit
Calculus BC	6	3	Math 50A, B
Music			
Listening and Literature	6	3	Music 10 plus 3 units elective credit
Physics			
Physics B	6	3	Physics 10 plus 3 units elective credit
Physics C	6	3	Physics 2A plus 2 units elective credit
Psychology	6	3	Psych 1 plus 3 units elective credit
Statistics	6	3	Math 15 plus 2 units elective credit

CLEP - College Level Examination Program:

Students may petition the Director of Enrollment Services for approval of six units of ungraded elective credit for each general examination: humanities, mathematics, natural science, and social science-history passed with a score of 500 or better in the College Level Examination Program (CLEP).

To take the CLEP, students must contact the Educational Testing Service in Princeton, N.J., and ask for a bulletin of test dates and locations. Since use of CLEP is limited, students should consult with a counselor before pursuing this option.

Note: Credit is not granted in the same field for both the AP and CLEP exams.

Photo: Paul DeMark

Credit by Examination

Board policy permits students to receive credit by examination in certain situations. Students should check with the Counseling and Advising Center or the Student Assistance Center for qualifying regulations and information (Board Policy 526 and Administrative Regulation 526.01).

Unit Defined

One class hour and two hours of outside work throughout the semester ordinarily serve as a basis for one unit of lecture credit. Three hours of laboratory work each week approximate one unit. The actual unit value of each course is listed in the course description and in class schedules.

Student Load

All units in which a student enrolls are used to determine a student's load. A full-time student enrolls in 12 or more units in a regular semester. Part-time students enroll in less than 12 units in a semester, or 6 units for summer session. Students who want to enroll in more than 18 units need the approval of a counselor or advisor.

Course Examinations

Permission to be absent from or to take any exam at any time other than that originally designated may, under exceptional circumstances, be granted at the discretion of the individual instructor.

Photo: Mark Larson

GRADES; GRADE POINTS

A ..... excellent ..... 4.0 grade points per unit
A- ..... excellent ..... 3.7 grade points per unit
B+ .... good ..... 3.3 grade points per unit
B ..... good ..... 3.0 grade points per unit
B- ..... good ..... 2.7 grade points per unit
C+ .... satisfactory ..... 2.3 grade points per unit
C ..... satisfactory ..... 2.0 grade points per unit
D ..... poor ..... 1.0 grade points per unit

F ..... failure ..... 0 grade points per unit

I ..... incomplete; if not made up, a final grade will be assigned by the instructor, based on work completed. ..... 0 grade points per unit

CR..... credit (at least a C or better; satisfactory; units awarded not counted in GPA) ..... 0 grade points per unit

NC .... no credit (less than satisfactory or failing; units not counted in GPA) ..... 0 grade points per unit

IP..... in progress ..... 0 grade points per unit

W ..... withdrawal ..... 0 grade points per unit

Final grades are permanent and not subject to change.

CREDIT/NO CREDIT (CR/NC)

Some courses are offered on a Credit/No Credit grade option basis--see course description listings. Regulations for Credit/No Credit are:

1. "Credit" is granted if a student satisfactorily completes the minimum course requirements (i.e., earns a C grade or better).
2. "No Credit" is granted when a student does not satisfactorily complete the basic course requirements. There is no grade point average penalty attached to a "no credit" grade, however, NCs are considered as non-progress (see Probation and Dismissal Policies which follow). No units are received/awarded for NC grades.
3. Unit credit is awarded for a Credit grade.
4. Units on a Credit basis shall be counted toward college requirements, up to a maximum of 14 units.
5. Units on a Credit basis shall be disregarded in determining a grade point average for all purposes for which a grade point average is required.
6. The Credit/No Credit option applies only to courses so identified in this catalog's course descriptions or in the Schedule of Classes.
7. Students must file their request for Credit/No Credit grading in the Student Assistance Center. The deadlines to file these requests are listed in each term's class schedule.

INCOMPLETE GRADES

Under extenuating circumstances, instructors may grant students a grade of Incomplete ("I") in a course. To qualify for an "I" grade, students must meet the following conditions:

- Most of the academic course work must have already been completed and there must be justifiable, extenuating circumstances which prevent the student from completing the course in the current term.
- The "I" must be made up no later than one semester following the end of the term in which it was assigned (not including summer session).

In addition, students should understand that:

- Students may not re-enroll in a course in which they have received an "I" grade. Students work independently with instructors to complete the remaining course requirements, including assignments, projects, and exams.

GRADE POINT AVERAGE (GPA)

A "grade point average" is computed each term by dividing the total grade points earned by the total units attempted.

For example, a student who earns a grade of A in six units, B in three units, C in three units, D in three units, and F in two and one-half units would have a grade-point average of 2.40. The computation is shown below:

6 units ***A*** ..... x 4 equals ..... 24 grade points
3 units ***B*** ..... x 3 equals ..... 9 grade points
3 units ***C*** ..... x 2 equals ..... 6 grade points
3 units ***D*** ..... x 1 equals ..... 3 grade points
2½ units ***F*** ..... x 0 equals ..... 0 grade points

17½ units ..... total equals ... 42 grade points

The 42 grade points divided by 17½ units equals a 2.40 grade point average.

"Cumulative grade point average" refers to the combined grade point average earned for all terms in which a student has been enrolled in college-level work.

Stock Photo

Photo: Paul DeMark

President's Honor List

The President's Honor List recognizes students who:

- **have completed nine or more graded units in courses numbered 1-199 with a minimum grade point average of 3.75, and**
- **have received no F, D, or I grades, and**
- **are not on progress probation.**

Vice President's Honors List

The Vice President's Honors List recognizes students who:

- **have completed nine or more graded credit units in courses numbered 1-199 with a minimum grade point average of 3.50 - 3.74, and**
- **have received no F, D, or I grades, and**
- **are not on progress probation**

Probation, Dismissal and Readmission

Failure to fulfill academic responsibilities is a serious matter. Accordingly, the following probation and dismissal policies have been established by the College.

Academic Probation

All students who have attempted at least 12 semester units shall be placed on Level I academic probation if they earn a cumulative grade point average below 2.0. This will occur if the student has taken these units at CR or if the student has transferred any or all of these units from another college.

If the student enrolls for additional units at CR after being placed on Level I probation, the following outcomes are possible:

- **Possible Outcome 1:** At the end of the term, the student's cumulative GPA meets or exceeds 2.0. **Result:** The student is returned to "good standing" status with the college.
- **Possible Outcome 2:** At the end of the term, the student's cumulative GPA remains below 2.0, but the term GPA meets or exceeds 2.0. **Result:** The student remains on Level I probation with the college.
- **Possible Outcome 3:** At the end of the term, the student's cumulative GPA remains below 2.0, and the term GPA is also less than 2.0. **Result:** The student is placed on Level II probation with the college.

If the student enrolls for additional units at CR after being placed on Level II probation, the following outcomes are possible:

- **Possible Outcome 1:** At the end of the term, the student's cumulative GPA meets or exceeds 2.0, and the term GPA also meets or exceeds 2.0. **Result:** The student is returned to "good standing" status with the college.
- **Possible Outcome 2:** At the end of the term, the student's cumulative GPA remains below 2.0, but the term GPA meets or exceeds 2.0. **Result:** The student returns to Level I Probation.
- **Possible Outcome 3:** At the end of the term, the student's cumulative GPA remains below 2.0, and the term GPA is also less than 2.0. **Result:** The student will be "Subject to Dismissal" from the college, and a block will be placed on his/her subsequent registration by the Associate Vice President, Student Learning Support Services. Unless the student files and has approved by the Associate Vice President a "Petition for Reinstatement," the student will not be able to reenroll at the college until at least one regular semester has passed.

Progress Probation

Any student who has attempted at least 12 semester units shall be placed on Progress Probation when he or she accumulates an excessive number of W, I, or NC units. Progress Probation will occur if the student has taken these units at CR or if the student has transferred any or all of these units from another college. Progress Probation will remain in effect until the percentage of units in which the student received a W, I, or NC becomes less than the threshold established by the college.

If the student remains on Progress Probation for three consecutive semesters, the student will be "Subject to Dismissal" from the college, and a block will be placed on his/her subsequent registration by the Director, Student Development. Unless the student files and has been approved by the "Petition for Reinstatement," the student will not be able to re-enroll at the college until at least one regular semester has passed. All questions about progress probation or dismissal should be addressed by a college counselor or advisor.

Qualifications For Readmission

After dismissal, a student may apply for readmission:

1. after an absence of one or more semesters; or
2. after completing five or more units with a 2.0 or better grade point average (excluding CR/NC) at another accredited college.

Dismissed students must meet with a counselor to complete a success contract prior to readmission.

Academic Renewal Without Course Repetition

A student's past, substandard, academic performance may not reflect the student's current academic ability. In such instances, the student's prior record may impair progress toward a legitimate educational goal. A student can request academic renewal by filing a petition with the college.

Academic renewal involves disregarding unsatisfactory grades in the computation of a student's GPA. Only those semesters during which a student earned a D, F, or N/C will be considered for academic renewal, and, if approved, the entire semester will be disregarded. Selective removal of grades within a given semester is not allowed. Questions about the academic renewal process should be directed to an academic counselor in the Counseling and Advising Center.

Staff Photo

Stock Photo

Repeating a Course

Courses at College of the Redwoods may be repeated under the following circumstances:

1. A student is repeating a course to alleviate sub-standard work (D, F, N/C grade). Only the last grade will be used in computing the GPA. Repetition of substandard course work must be approved by the Director of Enrollment Services, or designee.
2. Repetition of courses for which substandard academic course work (A, B, C or C/R grades) has not been recorded shall be permitted when special circumstances exist in the need to repeat the course. Only the first grade earned will be used in computing the GPA. A petition must be filed with the Director of Enrollment Services, or designee.
3. Special class course repeatability is authorized to permit additional repetition to meet the requirements of Section 504 of the 1973 Rehabilitation Act, 29 U.S.C., Section 794. Under the provisions of CR Board of Trustees Policy No. 533 and Administrative Regulation No. 533.01, the District may provide students academic accommodation because of special needs as defined by the act. (Check with the Disabled Students Programs and Services Office, T20, for additional information.)

Notices to Parents of Minor Students

The College reserves the right to notify the parents of minor students in cases of persistent scholastic deficiency, irregular attendance, or failure to maintain a proper standard of conduct, which could result in dismissal.

Changes in Requirements

College of the Redwoods reserves the right to change the regulations whenever it is deemed necessary, taking precautions that such changes do not cause hardship or injustice to students already enrolled at the College.

2004-2005 Graduation Requirements for the Associate Degree

Option A: Associate of Arts in University Studies

(Only courses with course numbers 1-99 may be used to fulfill the requirements for this degree.)

I. Completion of one of the following sets of general education requirements:
A. C.S.U. General Education Transfer requirements (minimum 39 units)
B. I.G.E.T.C. Transfer requirements (34-44 units)

II. Completion of a minimum of 60 units

Option B: Associate of Science in a Specific Program Area

(Only courses with course numbers 1-199 may be used to fulfill the requirements for this degree.)

I. Completion of C/R General Education requirements (18 units)

II. Completion of requirements specified for the program area

III. Completion of a minimum of 60 units

Option C: Associate of Arts in General Studies or Associate of Science in General Studies

(Only courses with course numbers 1-99 may be used to fulfill the requirements in sections 1 and II with the exception that MATH 120 may be used to fulfill the general education Analytical Thinking requirement.)

I. Completion of C/R General Education Requirements (18 units).

II. Completion of 24 units from one of the following two groups of disciplines:

Associate of Arts

ADCT	JPN
ART	JOURN
CINE	MUS
DANCE	NAS
DRAMA	PHIL
EDUC	POLSC
ENGL	PSYCH
FRNC	SNLAN
GERM	SOC
HIST	SPAN
IDS	SPCH
ITAL	

Associate of Science

AJ	DM	LEGL
AG	DT	MT
ANTH	ECE	MATH
AQUA	ECON	METEO
ASTRO	ENGR	NR
AT	ENVSC	NURS
BIOL	FOR	OCEAN
BUS	GEOG	PE
CHEM	GEOL	PHYSC
CET	GC	PHYS
CIS	HE	RE
CT	HO	RT
DHET	IT	WT

III. Completion of a minimum of 60 units

Additional Degrees

To be awarded an additional degree, a student must complete a minimum of 15 credits at College of the Redwoods in addition to the credits required for the first degree and must also complete all of the specific course requirements for the additional degree.

2004-2005 General Education Requirements for the Associate of Arts and the Associate of Science Degrees

A. Natural Science

		Units Required	Units Completed	Units Needed
Agriculture 17, 23 Astronomy 10, 11, 15A (lab) Biology 1, 2, 3, 4, 5, 8, 9, 10, 15, 20 Chemistry 1A, 2 Computer & Electronics 10 or 41, 41L (lab) Environmental Science 10, 12, 15 Geography 1	Geology 1, 2, 3, 10, 15 Licensed Vocational Nursing 114* Meteorology 1 Oceanography 10, 11(lab), 12 Physics 2A, 10 Physical Science 10	3		

B. Social Science

		Units Required	Units Completed	Units Needed
Administration of Justice 1 Anthropology 1, 2, 3, 5, 6 Business 10 Economics 1, 10, 20 Geography 2 History 4, 5, 7, 8, 9, 11, 12	Journ 5 Legal Studies 41* Native American Studies 1, 21 Political Science 1, 3, 10, 12 Psychology 1, 11, 30, 33 Sociology 1, 2, 3, 5, 10, 33	3		

C. Humanities

		Units Required	Units Completed	Units Needed
Art 1A, 1B, 2, 4, 10, 11, 17 Cinema 1, 2, 6 Drama 2, 24 English 8, 9, 10, 15, 17, 18, 20, 22, 28, 42, 45, 47 Environmental Science 11 French 1A, 1B, 2A, 2B	German 1A, 1B, 2A, 2B Japanese 1A, 1B, Music 1, 2, 10, 12, 14 Philosophy 1, 10, 12, 15, 20 Sign Language 4A, 4B Spanish 1A, 1B, 2A, 2B	3		

D. Language and Rationality

		Units Required	Units Completed	Units Needed
1. **Writing**	Business 152* Industrial Technology 120* English 1A, 1B, 150/L*, 153*	3		
2. **Oral Communications**	Speech 1, 6, 7	3		
3. **Analytical Thinking** Business 94* Industrial Technology 62*, 161*	Mathematics 5, 15, 21, 22, 25, 30, 45, 50A, 50B, 50C, 55, 105*, 106*, 120	3		

Additional Requirements for Graduation

- **Filing Petition**: Student must file a petition to graduate on or before the published deadline.
- **Unit Requirements**: A minimum of 60 semester units; however a maximum of 4 units of physical education activity courses and 9 units of Cooperative Education may be counted toward the degree.
- **Minimum GPA Requirements**: A cumulative 2.0 average GPA or better, for all work including a 2.0 GPA, or better, at College of the Redwoods.
- **Residence Requirement**
  A student must complete a minimum of 12 semester units at College of the Redwoods.
- **Credit Classes**
  A maximum of 14 units of credit (CR) grades will apply towards the degree, and only the first 14 units of credit grades on the transcript will be used toward the degree.
- **Course Limitations**
  Courses numbered from 200 to 399 **do not** apply toward the A.A./A.S. degree or transfer to other four year colleges and universities.

18	General Education requirements
42	Courses for major or electives
60	Total units required for Graduation

*** Applicable to Graduation Requirements Option B only,** see pg. 42.

COURSE TITLES

AREA A: NATURAL SCIENCES

AG 17	Introduction to Soils
AG 23	Introduction to Plant Science
ASTRO 10	Introduction to Astronomy
ASTRO 11	Solar Systems & Space Exploration
ASTRO 15A	Observational Astronomy
BIOL 1	General Biology
BIOL 2	Microbiology
BIOL 3	Fundamentals of Cell Biology
BIOL 4	General Zoology
BIOL 5	Introduction to Botany
BIOL 8	Human Biology
BIOL 9	Plants and Civilization
BIOL 10	Introduction to Biology
BIOL 15	Marine Biology
BIOL 20	Natural History
CET 10	Survey of Electronics
CET 41	Electrical Fundamentals I
CET 41L	Electrical Fundamentals I-L
CHEM 1A	General Chemistry
CHEM 2	Introduction to General Chemistry
ENVSC 10	Environmental Science
ENVSC 12	Earth's Changing Climate
ENVSC 15	Introduction to Energy
GEOG 1	Introduction to Physical Geography
GEOL 1	General Geology
GEOL 2	Historical Geology
GEOL 3	Rocks & Minerals
GEOL 10	Environmental Geology
GEOL 15	Earthquakes & Plate Tectonics
*LVN 114	Anatomy/Physiology
METEO 1	Introduction to Meteorology
OCEAN 10	Introduction to Oceanography
OCEAN 11	Laboratory in Oceanography
OCEAN 12	Environmental Oceanography
PHYS 2A	General Physics
PHYS 10	Introduction to Physics
PHYSCI 10	Introduction to Physical Sciences

AREA B: SOCIAL SCIENCES

AJ 1	Introduction to Administration of Justice
ANTH 1	Physical Anthropology
ANTH 2	Introduction to Archaeology
ANTH 3	Cultural Anthropology
ANTH 5	Great Archaeological Discoveries
ANTH 6	Forensic Anthropology
BUS 10	Intro. to Business Organization
ECON 1	Macroeconomics
ECON 10	Microeconomics
ECON 20	Economic History of the U.S.
GEOG 2	Cultural Geography
HIST 4	Western Civilization, to 1600
HIST 5	Western Civ, 1600 to Present
HIST 7	History of Modern Asia
HIST 8	U.S. History to 1877
HIST 9	U.S. History Since 1877
HIST 11	Women in American History: Pre Contact - 1877
HIST 12	Women in American History: 1877 - Present
JOURN 5	Intro. to Mass Communication
*LEGL 41	Intro. to Law & the Legal System
NAS 1	Intro. to Native American Studies
NAS 21	Native American History, 1790 - 1890
POLSC 1	Contemporary Problems
POLSC 3	Modern World Problems
POLSC 10	American Institutions
POLSC 12	State and Local Politics
PSYCH 1	General Psychology
PSYCH 11	Life Span Development
PSYCH 30	Social Basis of Behavior
PSYCH 33	Personal Growth & Adjustment
SOC 1	Introduction to Sociology
SOC 2	Social Problems
SOC 3	Human Sexuality
SOC 5	Race and Ethnic Relations
SOC 10	Marriage and Family
SOC 33	Death: The Inevitable Crisis

AREA C: HUMANITIES

ART 1A	Art History: Prehistory to Gothic
ART 1B	Art History: Renaissance to Contemporary
ART 2	Introduction to Art
ART 4	Art Appreciation
ART 10	Color and Design
ART 11	Three-Dimensional Design
ART 17	Drawing
CINE 1	Cinema - Origin to 1944
CINE 2	Cinema - 1945-Present
CINE 6	Selected Film Authors
DRAMA 2	Intro to Oral Interpretation
DRAMA 24	Introduction to the Theatre
ENGL 8	Introduction to Contemporary Literature
ENGL 9	Intro. to Modern Literature
ENGL 10	Introduction to Literature
ENGL 15	American Literature to 1860
ENGL 17	American Literature, Colonial-Civil War
ENGL 18	American Lit,Civil War-WW II
ENGL 20	Intro duction to Non-Western Literature
ENGL 22	Greek Mythology
ENGL 28	Women in Literature
ENGL 42	Great Writers, Ancient to Renaissance
ENGL 45	English Literature - Chaucer to Present
ENGL 47	Intro to Shakespeare
ENVSCI 11	Environmental Ethics
FRNC 1A, 1B	Elementary French
FRNC 2A, 2B	Intermediate French
GERM 1A, 1B	Elementary German
GERM 2A, 2B	Intermediate German
JPN 1A, 1B	Elementary Japanese
MUS 1	Introduction to Music
MUS 2	Beginning Music Theory
MUS 10	Music Appreciation
MUS 12	American Pop Music
MUS 14	Music of the Whole Earth
PHIL 1	Critical Thinking
PHIL 10	Introduction to Philosophy
PHIL 12	Logic
PHIL 15	Religions of the World
PHIL 20	Ethics
SNLAN 4A, 4B	American Sign Language
SPAN 1A,1B	Elementary Spanish
SPAN 2A,2B	Intermediate Spanish

AREA D: LANGUAGE & RATIONALITY

1. Writing

*BUS 152	Business English
ENGL 1A	College Composition
ENGL 1B	Composition and Literature
*ENGL150/150L	Grammar and Composition with Lab
*ENGL 153	ESL College Reading and Writing
*IT 120	Technical Writing and Documentation

2. Oral Communications

SPCH 1	Public Speaking
SPCH 6	Group Discussion
SPCH 7	Interpersonal Communications

3. Analytical Thinking

*BUS 94	Business Math	MATH 22	Business Calculus	MATH 50C	Calculus III
*IT 62	Technical Mathematics	MATH 25	College Trigonometry	MATH 55	Differential Equations
*IT 161	Technical Mathematics	MATH 30	College Algebra	*MATH 105	Elementary Algebra
MATH 5	Contemporary Mathematics	MATH 45	Linear Algebra	*MATH 106	Elementary Algebra
MATH 15	Elementary Statistics	MATH 50A	Calculus I	MATH 120	Intermediate Algebra
MATH 21	Finite Math	MATH 50B	Calculus II		

California State University System General Education Requirements for Transfer, 2004-2005

Each candidate for a bachelor's degree from a California State University shall complete a pattern of general education courses with a minimum of 48.0 semester units. A student may complete a maximum of 39.0 semester units at a community college. The remaining 9.0 units must be upper division courses and shall be earned at an institution granting the four-year degree.

Of the 39.0 semester units that may be taken and certified by College of the Redwoods, no more than 30.0 semester units total may be certified in categories B, C and D. The college will certify only courses taken at College of the Redwoods from the following list:

Area A

Communications and Critical Thinking

One course from each of the three areas for a total of 9.0 units.

A1. Oral Communication: SPCH 1

A2. Written Communication: ENGL 1A

A3. Critical Thinking (one course): ENGL 1B; PHIL 1, 12

Area B

Science and Math

One course from B1, B2, and B4 for a total of 9.0 units. One of the two science courses must include a lab. Lab courses are noted with an *.

B1. Physical Science: AG 17*; ASTRO 10, 11, 15A*; CHEM 1A*, 2*; CET 10; ENVSC 12, 15; GEOG 1; GEOL 1*, 10, 15; METEO 1; OCEAN 10, 11*, 12; PHYS 10; PHYSC 10

B2. Life Science: AG 23*; BIOL 1*, 3*, 8*, 10*, 15*, 20*; ENVSC 10*

B3. Laboratory Activity: Lab courses are marked (*) and are included in B1 and B2.

B4. Mathematical/Quantitative Reasoning: MATH 5, 15, 21, 22, 25, 30, 50A

Area C

Arts, Literature, Philosophy and Foreign Language

Complete 3 courses with at least ***one*** from the **Arts** and ***one*** from the **Humanities** for a minimum of 9 units.

Arts
ART 1A, 1B, 2
4, 17
CINE 1, 2
DRAMA 24
MUS 1, 10, 12, 14

Humanities
ENGL 8, 9, 10, 15, 17
18, 20, 22, 45, 47
ENVSC 11
FRNC 1A, 1B, 2A, 2B
GERM 1A, 1B, 2A, 2B
PHIL 10, 15, 20
SNLAN 4A, 4B
SPAN 1A, 1B, 2A, 2B

Area D

Social, Political and Economic Institutions

Nine units required.

Complete 1 course: POLSC 10

Complete 1 course: ECON 20; HIST 8, 9; NAS 21

Complete 1 course:

D1. ANTH 1, 2, 3, 5

D2. ECON 1, 10, 20; BUS 10

D3. NAS 1

D5. GEOG 2

D6. HIST 4, 5, 7, 8, 9, 11, 12

D7. JOURN 5

D8. POLSC 1, 12

D9. PSYCH 30

D0. AJ 1; SOC 1, 2, 5, 10

Area E

Lifelong Understanding and Self-Development

One course from the block below to total a maximum of 3.0 units.

E1. HE 1; HO 15; PE 66; PSYCH 1, 11, 33; SOC 3, 33

Students transferring from another college who have completed fewer than 3 semester units from this area should see a counselor or advisor.

Transfer Requirements

For students wishing to pursue a bachelor's (four-year) degree, College of the Redwoods offers the first two years of most four-year degree programs. In addition, students may make up any high school grade or subject deficiencies which are required for entrance to four-year colleges or universities.

Requirements of various college and universities will vary — no two state colleges or branches of a university will necessarily have the same requirements. Students, therefore, should secure a copy of the appropriate college or university catalog and work closely with their advisors in planning their programs.

Transfer Agreements with Colleges and Universities

College of the Redwoods negotiates agreements with a number of colleges and universities whereby, these institutions guarantee that they will accept certain College of the Redwoods courses as fulfilling specific lower division requirements in various major fields. These transfer agreements are also referred to as **'Articulation Agreements.'** Transfer information for many of College of the Redwoods programs may be obtained at www.assist.org. Assist is the statewide articulation site designed to be used by counselors and students to determine equivalent course work and requirements at other colleges and universities.

California Articulation Number (CAN)

The California Articulation Number (CAN) System identifies some of the transferrable, lower division, introductory, preparatory courses commonly taught within each academic discipline on college campuses.

The system assures students that CAN courses on one participating campus will be accepted in lieu of the comparable CAN courses on another participating campus. *Example:* CAN ECON 2 on one campus will be acceptable for CAN ECON 2 on another participating campus. Each campus retains its own numbering system.

Check with counseling offices and academic advisors, as well as campus publications, for lists of participating campuses and courses.

CAN Qualified Courses at College of the Redwoods

Calif. Articulation No.		College of the Redwoods course:
CAN AG	18	AG 16, Ornamental Plant Identification
CAN AJ	2	AJ 1, Introduction to Administration of Justice
CAN AJ	4	AJ 4, Criminal Law
CAN AJ	6	AJ 6, Introduction to Evidence
CAN AJ	8	AJ 8, Introduction to Investigation
CAN ANTH	2	ANTH 1, Physical Anthropology
CAN ANTH	4	ANTH 3, Cultural Anthropology
CAN ANTH	6	ANTH 2, Introduction to Archaeology
CAN ART	2	ART 1A, Art History: Pre-History to 16th Century
CAN ART	4	ART 1B, Art History: 17th Century to 20th Century
CAN ART	6	ART 31A, Introduction to Ceramics
CAN ART	8	ART 17, Drawing
CAN ART	10	ART 23, Painting
CAN ART	12	ART 3A, Beginning Sculpture
CAN ART	14	ART 10, Color and Design
CAN ART	16	ART 11, Three-Dimensional Design
CAN ART	18	ART 35, Photography
CAN ART	SEQ A	ART 1A & 1B, Art History
CAN BIOL	2	BIOL 3, Fundamentals of Cell Biology
CAN BIOL	4	BIOL 4, General Zoology
CAN BIOL	6	BIOL 5, Introduction to Botany
CAN BIOL	10	BIOL 6, Human Anatomy
CAN BIOL	12	BIOL 7, Human Physiology
CAN BIOL	14	BIOL 2, Microbiology
CAN BIOL	SEQ A	BIOL 3, 4, & 5 (see above)
CAN BIOL	SEQ B	BIOL 6 & 7 (see above)
CAN BUS	2	BUS 1A, Principles of Accounting
CAN BUS	4	BUS 1B, Principles of Accounting
CAN BUS	12	BUS 18, Business Law
CAN BUS	SEQ A	BUS 1A & 1B, Principles of Accounting
CAN CHEM	2	CHEM 1A, General Chemistry
CAN CHEM	4	CHEM 1B, General Chemistry
CAN CHEM	6	CHEM 2, Introduction to General Chemistry
CAN CHEM	8	CHEM 3, Introduction to Organic Chemistry
CAN CHEM	SEQ A	CHEM 1A & 1B, General Chemistry
CAN ECON	2	ECON 1, Macro Economics
CAN ECON	4	ECON 10, Micro Economics
CAN ENGL	2	ENGL 1A, College Composition
CAN ENGR	2	ENGR 23, Engineering Graphics
CAN ENGR	8	ENGR 35, Statics
CAN FREN	2	FRNC 1A, Elementary French
CAN FREN	4	FRNC 1B, Elementary French
CAN FREN	8	FRNC 2A, Intermediate French
CAN FREN	10	FRNC 2B, Intermediate French
CAN FREN	SEQ A	FRNC 1A & 1B, Elementary French
CAN FREN	SEQ B	FRNC 2A & 2B, Intermediate French
CAN GEOG	2	GEOG 1, Introduction to Physical Geography
CAN GEOG	4	GEOG 2, Cultural Geography

(Continued)

CALIF. ARTICULATION NO.		COLLEGE OF THE REDWOODS COURSE:
CAN GEOL	2	GEOL 1, General Geology - Physical
CAN GOVT	2	POLSC 10, American Institutions
CAN HIST	2	HIST 4, Western Civilization: 3000 BC - 1600 AD
CAN HIST	4	HIST 5, Western Civilization: 1600 to Present
CAN HIST	8	HIST 8, U.S. History to 1877
CAN HIST	10	HIST 9, U.S. History since 1877
CAN HIST	SEQ A	HIST 4 & 5, (see above)
CAN KINE/PE	2	PE 65, Introduction to Physical Education
CAN KINE/PE	8	HE 7, Standard First Aid and Personal Safety
CAN KINE/PE	10	PE 47, Water Safety Instructor
CAN MATH	2	MATH 5, Contemporary Mathematics
CAN MATH	8	MATH 25, Trigonometry
CAN MATH	18	MATH 50A, Calculus I
CAN MATH	20	MATH 50B, Calculus II
CAN MATH	22	MATH 50C, Calculus III with Linear Algebra
CAN MATH	24	MATH 55, Differential Equations
CAN MATH	26	MATH 45, Linear Algebra
CAN MATH	34	MATH 22, Business Calculus
CAN MATH	SEQ B	MATH 50A & 50B, Calculus I & II
CAN MATH	SEQ C	MATH 50A, 50B, 50C, Caplculus I, II, & III
CAN PHIL	2	PHIL 10, Introduction to Philosophy
CAN PHIL	4	PHIL 20, Ethics
CAN PHIL	6	PHIL 12, Logic
CAN PHYS	2	PHYS 2A, General Physics
CAN PHYS	4	PHYS 2B, General Physics
CAN PHYS	8	PHYS 4A, Engineering Physics
CAN PHYS	12	PHYS 4B, Engineering Physics
CAN PHYS	14	PHYS 4C, Engineering Physics
CAN PHYS	SEQ A	PHYS 2A & 2B, General Physics
CAN PHYS	SEQ B	PHYS 4A, 4B & 4C, Engineering Physics
CAN PSY	2	PSYCH 1, General Psychology
CAN REC	8	AG 17, Introduction to Soils
CAN SOC	2	SOC 1, Introduction to Sociology
CAN SOC	4	SOC 2, Social Problems
CAN SPAN	2	SPAN 1A, Elementary Spanish
CAN SPAN	4	SPAN 1B, Elementary Spanish
CAN SPAN	8	SPAN 2A, Intermediate Spanish
CAN SPAN	10	SPAN 2B, Intermediate Spanish
CAN SPAN	SEQ A	SPAN 1A & 1B, Elementary Spanish
CAN SPAN	SEQ B	SPAN 2A & 2B, Intermediate Spanish
CAN SPCH	4	SPCH 1, Public Speaking
CAN SPCH	8	SPCH 7, Interpersonal Communication
CAN SPCH	10	SPCH 6, Group Decision Making
CAN STAT	2	MATH 15, Elementary Statistics

MULTIPLE DEGREE AND MAJOR REGULATION

The Board of Trustees adopt these specific requirements for the determination and grading of a second associate degree (either an Associate in Arts "A.A." or Associate in Science "A.S." Degree):

1. The General Education (G.E.) requirements for the second degree may be fulfilled with lower division G.E. courses from the previous degree(s). However, ***any*** unmet G.E. requirements on the current G.E. pattern ***must*** be completed prior to the granting of the subsequent degree. A student ***must*** meet ***all*** G.E., major, and elective requirements of the A.A./A.S. Degree at the time the degree is granted. However, for continually enrolled students, appropriate catalog rights will be considered.
2. The student ***must*** complete 15 units "in residence" applicable to the degree.
3. The granting of a second or subsequent degree will be transacted as follows:
   a. A.A. Degree granted and student requests an A.S. Degree — The student would complete required A.S. major course requirements.
   b. A.S. Degree requested with several majors (e.g., Manufacturing Technology and Computer Numerical Control) — The student would complete the courses required in each separate major. A single diploma would be awarded with each major listed.
   c. A.S. Degree granted and at a later time certification in a separate major is requested — The student would complete the required courses within the major. A new diploma would be awarded with each major listed.
4. The appropriate diploma processing fee will be assessed for each new diploma or major.
5. The academic grade transcript will be annotated with each degree/diploma awarded.

Intersegmental General Education Transfer Curriculum for Transfer to California State University and University of California, 2004-2005

Completion of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) plus additional transferrable course work to total 56 semester units will permit a student to transfer from a community college to a campus in either the California State University or University of California system without the need, after transfer, to take additional lower division general education courses to satisfy campus general education requirements.

Area 1

English Composition

CSU: 3 courses required—one from each group below

UC: 2 courses required, one each from group A and group B

Group A: English Composition: ENGL 1A

Group B: Critical Thinking/English Composition: ENGL 1B

Group C: Oral Communication (CSU only); SPCH 1

Area 2

Mathematical Concepts and Quantitative Reasoning

1 Math course: MATH 15, 21, 22, 30, 50A

Area 3

Arts and Humanities

At least 3 courses with at least one from the **Art**s and one from the **Humanities**, 9 semester units:

Arts: ART 1A, 1B, 4; CINE 1, 2; DRAMA 24; MUS 1, 10, 12, 14

Humanities:
ENGL 8, 9, 10, 15, 17, 18, 20, 22, 45, 47; ENVSC 11; FRNC 2A, 2B; GERM 2A, 2B; HIST 4, 5; NAS 21; PHIL 10, 15; SPAN 2A, 2B

Area 4

Social and Behavioral Sciences

At least 3 courses from at least two disciplines:
AJ 1; ANTH 1, 2, 3, 5; ECON 1, 10, 20; GEOG 2; HIST 7, 8, 9, 11, 12; JOURN 5; NAS 1; POLSC 1, 10; PSYCH 1,11, 30; SOC 1, 2, 3, 5

The course requirements for areas 1 through 5 must be completed before the IGETC can be certified. All courses must be completed with grades of C or better. UC certification requires that Areas 1 though 5 and the foreign language requirement must be completed.

Some UC majors will not accept IGETC certification. Be sure to check with your Counselor.

Area 5

Physical and Biological Sciences

2 courses required—one Physical Science and one Biological Science; at least one must include a laboratory, 7-9 semester units. Lab classes are noted with an *:

Physical Sciences:
ASTRO 10, 11, 15A*; CHEM 1A*, 2*; ENVSC 12, GEOG 1; GEOL 1*, 10, 15; METEO 1; OCEAN 10, 11*, 12; PHYS 10

Biological Sciences:
BIOL 1*, 3*, 10*, 15*; ENVSC 10*

Language Other Than English

Complete 2 years of the same foreign language of high school level work with a grade of C or better, or earn a score of 3 or higher on the foreign language Advanced Placement test, or 550 on the College Board Achievement Test in Foreign Language or complete one of the courses listed below:

FRNC 1B, GERM 1B, JPN 1B, SPAN 1B or Sign Language 4B.

Note: One semester of a foreign language at College of the Redwoods is equivalent to one year of a high school language.

Also, to receive IGETC certification for language courses completed in high school, official transcripts must be on file with the College of the Redwoods Admissions Office.

Not required for IGETC

U.S. History, Constitution and American Ideals (CSU requirement only)

Graduation requirements for CSU—6 units, one course from group A and one course from group B:

Group A: POLSC 10
Group B: ECON 20; HIST 8, 9; NAS 21

Note: Courses used to fulfill the U.S. History, Constitution and American Ideals requirement may not also be used to satisfy IGETC requirements in Area 4.

COMMUNITY & ECONOMIC DEVELOPMENT DIVISION

COMMUNITY & ECONOMIC DEVEMOPMENT

provides a wide range of educational opportunities throughout Del Norte, Humboldt, and Mendocino counties. Classes, programs, training, and workshops are offered as lifelong learning opportunities. The not-for-credit classes are designed to develop professional skills, enhance career opportunities, enrich personal knowledge, and promote cultural and academic growth.

COMMUNITY EDUCATION

Class offerings may include avocational subjects such as art, consumer issues, self improvement, home and garden, and photography. Classes may also be designed to meet the specific needs of a business or organization. Community Education classes may be offered during the day, evening, weekend and on-line. These are not-for-credit classes and workshops are fee-based. Many of these are held at CR's **Center for Community Education (CCE)**, located in the Historic Ricks House, at 8th and "H" streets in Eureka.
(707) 445-6726

PROFESSIONAL DEVELOPMENT

Professional Development educational opportunities range from job-related workshops and seminars to full-semester courses. Typical non-credit courses include **computer software training, AutoCAD, E-Commerce, Management Skills, Conflict Resolution, Customer Service, and Spanish for the Workplace**. College of the Redwoods is especially interested in meeting the needs of all businesses small and large. (707) 445-6726

CUSTOMIZED TRAINING

To remain competitive in today's marketplace, businesses must rely on the continued optimal performance of their most important asset, their employees. College of the Redwoods responds to this immediate need by providing a full range of customized training services that increase the employees' knowledge and skill base. These results translate to a high return on investment in the form of higher employee productivity, time savings, and better quality products. (707) 445-6726

COMPUTER TRAINING CENTERS

College of the Redwoods offers two convenient computer training centers. The **Arcata Instructional Site** is located at 100 Ericson Court, Suite C in Arcata. The CR Computer Lab**,** at the **Prosperity! Center** is located at 520 E Street in Eureka. Classes are scheduled for open enrollment and can be customized for your specific business needs. For information about these above programs, please call CCE at (707) 445-6726 or 445-5376.

FOSTER PARENT KINSHIP CARE PROGRAM

Expand your heart through foster and kinship pre-service training. CR's Foster and Kinship Care Education (FKCE) Program provides accessible and useful information that will educate and challenge foster and kinship care providers. If you are already a licensed care provider, enhance your skills and sharpen your knowledge by attending our in-service, therapeutic and special topic training classes.
(707) 476-4339

TOURISM AND HOSPITALITY

College of the Redwoods is responding to community needs by developing a new program in Tourism and Hospitality. Classes are being offered in Customer Service, Safe Food Handling Certification, Hotel and Resort Management, Tourism Development, and Culinary Arts. (707) 445-5387

TRUCK DRIVING

This program provides training and a background for many kinds of truck driving jobs. It involves lecture and driving time. Topics include gauges and instruments, safety, shift patterns for various transmissions, brake systems and adjustment. Upon successful completion of the course, students receive a certificate and will be accompanied to the DMV for their final test.

REAL ESTATE LICENSE PREPARATION

Community & Economic Development offers a distance learning program that meets the approved course requirement to take the state real estate license examination. The course is completed at home with no classroom attendance. (707) 476-4136

TRIBAL COURT JUSTICE

This unique certificated program is comprised of three basic courses designed for people who want to serve as advocates or spokespersons in the tribal courts or those interested in social work, public health, law enforcement, or the legal system. The courses include an *Introduction and Overview*, followed by *Case Development and Presentation*, and conclude with *Appellate Level* class. (707) 476-4136

MEDICAL

Certain fee-based medical certificate courses are also available such as Injections and Venipuncture for medical assistants under the supervision of a physician. EMT and CPR refresher courses are also offered as well as an IV Therapy class. (707) 476-4136

Photo: Paul DeMark

Associate of Science Degrees and Certificates

The following section gives the course requirements for Associate of Science degrees (see Option B on page 42) and certificates in specific professional and/or technical fields. For additional information regarding these programs, contact the appropriate division office or go to redwoods.edu.

Photo's: Paul DeMark

CR ... your community college ... changing lives for 40 years!

ACADEMIC AWARDS BY LOCATION

College of the Redwoods offers Associate of Science (AS) degrees, Certificates of Achievement (CA), and Certificates of Completion (CC). These academic awards are available to students at the college's three primary campuses as indicated in the following table.

	Eureka			Del Norte			Mendocino		
	AS	CA	CC	AS	CA	CC	AS	CA	CC
Addiction Studies	X			X			X		
Administration of Justice	X	X							
Basic Law Enforcement Academy		X							
Corrections Officer			X						
Probation Officer			X						
Agriculture	X								
Business Management	X	X	X						
Animal Science			X						
Plant Science	X	X							
Ornamental Horticulture		X							
Sustainable Agriculture		X							
Crop Management			X						
Landscape Maintenance			X						
Nursery Practices			X						
Automotive Technology	X								
Basic Automotive Technology	X								
Advanced Automotive Technology		X							
Business	X	X					X	X	
Computer Applications & Office Systems	X						X		
Legal Secretary	X	X							
Word Processing			X						X
Desktop Publishing			X						X
Income Tax Preparation			X						
General Office Technology			X			X			X
Basic Office Skills			X						
Payroll Clerk			X			X			X
Bookkeeping			X			X			X
Computer Electronics Technology									
Computer Maintenance & Networking	X	X	X						
Electronics Technology	X	X	X						
Computer Information Systems									
Computer Programming	X								
Construction Technology	X								
Residential Construction I		X							
Residential Construction II		X							
Residential Wiring			X						
Cabinetmaking and Millwork			X						
Historic Preservation & Restoration	X		X						
Fine Woodworking I								X	
Fine Woodworking II								X	

	Eureka			Del Norte			Mendocino		
	AS	CA	CC	AS	CA	CC	AS	CA	CC
Court Reporting		X							
Dental Assisting	X	X							
Diesel Heavy Equipment Technology	X	X							
Diesel Engine Overhaul			X						
Diesel Truck Maintenance			X						
Diesel Electrical System			X						
Diesel Power Train			X						
Diesel Fuel Injection			X						
Digital Media	X	X							
Animation		X							
Internet Design		X							
Drafting Technology									
Architectural Drafting	X	X							
Civil Design	X	X							
Computer Aided Design & Drafting (CADD)			X						
Mechanical Drafting	X	X							
Early Childhood Education			X			X			X
Infant/Toddler Care and Intervention	X			X					
Preschool	X			X					
School Age	X			X					
Special Needs	X			X					
Forestry & Natural Resources Technology	X								
Basic Forestry & Natural Resouorces Technology		X							
Advanced Forestry & Natural Resources Technology		X							
Geographic Information Systems		X							
Graphic Communications							X	X	
Legal Assistancy									
Legal Assistancy/Paralegal Studies	X								
Paralegal Studies		X							
Child Support Specialist		X							
Licensed Vocational Nursing	X	X		X	X				
Manufacturing Technology	X	X	X						
Computer Numerical Control	X	X	X						
CADD/CAM Manufacturing	X	X							
Numerical Control Maintenance	X	X							
Marine Science Technology							X	X	
Medical Assisting	X	X							
Natural History									X
Nursing									
Registered Nursing	X								
LVN Career Mobility	X		X						
Real Estate			X						X
Welding Technology		X							
Electric Arc & Oxyacetylene Welding			X						
MIG & TIG Welding			X						

ADDICTION STUDIES [ADCT]

This certificate program provides an academic and experiential setting for the study of addictions, including theories, prevention and assistance techniques, and research. The program is certified by the California Association for Alcohol/Drug Educators. Employment opportunities in this field include drug and alcohol treatment advising, family and youth services, education, rehabilitation, community health, mental health, employment assistance programs, senior programs, community-based non-profit agencies, and case-management services.

[ADCT] Certificate of Achievement, Addiction Studies

	Units
Total Units	34.0
Program Requirements	34.0
Specific Courses	30.0
ADCT 10 Introduction to Addiction Studies	3.0
ADCT 11 Pharmacology and Physiology of Addiction	3.0
ADCT 12 Substance Abuse: Law, Prevention, and Education	3.0
ADCT 13 Substance Abuse in Special Populations	3.0
ADCT 14 Health, Nutrition, and Addiction	3.0
SOC 34 Introduction to Social Work	3.0
ADCT 15 Introduction to Counseling Skills	3.0
ADCT 16 Family Systems	3.0
ADCT 17 Field Experience II	3.0
SOC 38 Field Experience	3.0
Additional Courses	4.0
SOC or PSYCH Elective	4.0

ADMINISTRATION OF JUSTICE [AJ]

Programs in this field provide general and specific educational opportunities for students seeking careers in the criminal justice system, including law enforcement, courts, and corrections. Specific programs include:

- Associate of Science Degree, Administration of Justice
- Certificate of Achievement, Administration of Justice
- Certificate of Achievement, Basic Law Enforcement Academy
- Certificate of Completion, Corrections Officer
- Certificate of Completion, Probation Officer

Photo: Bob Hamilton

(AJ) Associate of Science Degree, Administration of Justice

	Units
Total Units	60.0
General Education Requirements	18.0
Core Courses (Areas A, C, D1, D2, D3)	15.0
Specific Courses	3.0
AJ 1 Introduction to Administration of Justice (Area B)	3.0
Program Requirements	42.0
Specific Courses	26.0
AJ 2 Introduction to Law Enforcement	3.0
AJ 3 Introduction to Corrections	3.0
AJ 4 Criminal Law	4.0
AJ 5 Crime and Delinquency	3.0
AJ 6 Introduction to Evidence	4.0
AJ 7 Community and Human Relations	3.0
AJ 8 Introduction to Investigation	3.0
AJ 9 Communication Methods for Law Enforcement	3.0
Additional Courses (16.0 units from the following):	16.0
AJ 10 Juvenile Justice	3.0
AJ 80 Basic Academy	34.5
AJ 187 Advanced Officer Training	0.5-3.5
AJ 190F Penal Code 832 Firearms	0.5
AJ 190S Penal Code 832	2.5
AJ 191 Reserve Police Training	4.0
ANTH 1 Physical Anthropology	3.0
ANTH 3 Cultural Anthropology	3.0
CIS 1/1L Computer Literacy	3.0
CE 42 Occupational Cooperative Education	3.0
PE (Activity Class)	1.0-4.0
PSYCH 1 General Psychology	3.0
PSYCH 33 Personal Growth and Adjustment	3.0
PSYCH 38 Abnormal Psychology	3.0
SOC 1 Introduction to Sociology	3.0
SOC 2 Social Problems	3.0
SOC 3 Human Sexuality	3.0
SOC 5 Race and Ethnic Relations	3.0
SOC 10 Marriage and the Family	3.0
SPAN 1A Elementary Spanish	4.0
SPAN 1B Elementary Spanish	4.0

[AJ] Certificate of Achievement, Administration of Justice

	Units
Total Units	29.0
Program Requirements	29.0
AJ 1 Introduction to Administration of Justice	3.0
AJ 2 Introduction to Law Enforcement	3.0
AJ 3 Introduction to Corrections	3.0
AJ 4 Criminal Law	4.0
AJ 5 Crime and Delinquency	3.0
AJ 6 Introduction to Evidence	4.0
AJ 7 Community and Human Relations	3.0
AJ 8 Introduction to Investigation	3.0
AJ 9 Communication Methods for Law Enforcement	3.0

[AJ] Certificate of Achievement, Basic Law Enforcement Academy

	Units
Total Units	34.5
Program Requirements	34.5
AJ 80 Basic Academy	34.5

[AJ] Certificate of Completion, Corrections Officer

	Units
Total Units	6.5
Program Requirements	6.5
AJ 189 Corrections Officer Training: Core Course	6.5

[AJ] Certificate of Completion, Probation Officer

	Units
Total Units	7.5
Program Requirements	7.5
AJ 154 Probation Officer Core Course	7.5

Photo: Paul DeMark

AGRICULTURE [AG]

Programs in this field provide general and specific educational opportunities for students seeking careers related to agriculture, agricultural business, and plant and animal science. Specific programs include:

- Associate of Science Degree, Agriculture
- Associate of Science Degree, Agriculture Business Management
- Associate of Science Degree, Plant Science
- Certificate of Achievement, Agriculture Business Management
- Certificate of Achievement, Plant Science
- Certificate of Achievement, Ornamental Horticulture
- Certificate of Achievement, Sustainable Agriculture
- Certificate of Completion, Animal Science
- Certificate of Completion, Agriculture Business Management
- Certificate of Completion, Crop Management
- Certificate of Completion, Landscape Maintenance
- Certificate of Completion, Nursery Practices

[AG] Associate of Science Degree, General Agriculture

	Units
Total Units	60.5
General Education Requirements	18.5
Core Courses (Areas B, C, D2)	9.0
Specific Courses	9.5
AG 17 Introduction to Soils (Area A)	3.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra (Area D3)	3.0
Program Requirements	42.0
Specific Courses	19.0
AG 18 Soil Fertility and Fertilizers	3.0
AG 23 Introduction to Plant Science	3.0
AG 31 Farm Business Management	3.0
AG 35 Agricultural Sales & Merchandising	3.0
AG 46 Computers in Agriculture Management	3.0
BUS 1A Principles of Accounting	4.0
Additional Courses (23.0 units from the following):	23.0
AG 3 Intro to Animal Science	3.0
AG 5 Horse Husbandry	2.0
AG 6 Large Animal Diseases	3.0
AG 7 Animal Feeds & Feeding	3.0
AG 11 Sustainable Livestock Production	3.0
AG 16 Ornamental Plant Identification	3.0
AG 19 Weeds and Weed Control	3.0
AG 21 Plant Propagation	3.0
AG 22 Sustainable Vegetable Production	3.0
AG 26 Landscape Plant Identification	3.0
AG 27 Nursery Practices	3.0

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(continued - A.S. Degree General Agriculture)

AG 29 Pest Management	1.0
AG 39 Field Experience in Agriculture	1.0
AG 40 Independent Study in Agriculture	0.5-2.0
AG 63 Introduction to Sustainable Agriculture	2.0
AG 63L Introduction to Sustainable Agriculture -Lab	1.0
AG 65/65L Agriculture Enterprise Project/Lab	3.0
AG 99 Selected Topics in Agriculture	0.5- 4.0

[AG] Associate of Science Degree, Agriculture Business Management

	Units
Total Units	60.5
General Education Requirements	18.5
Core Courses (Areas C, D2)	6.0
Specific Courses	12.5
AG 17 Introduction to Soils (Area A)	3.0
ECON 1 Macroeconomics (Area B)	3.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra (Area D3)	3.0
Program Requirements	42.0
Specific Courses	19.0
AG 18 Soil Fertility and Fertilizers	3.0
AG 23 Introduction to Plant Science	3.0
AG 31 Farm Business Management	3.0
AG 35 Agricultural Sales & Merchandising	3.0
AG 46 Computers in Agriculture Management	3.0
BUS 1A Principles of Accounting	4.0
Additional Courses (23.0 units from the following):	23.0
AG 3 Introduction to Animal Science	3.0
AG 6 Large Animal Diseases	3.0
AG 7 Animal Feeds and Feeding	3.0
AG 11 Sustainable Livestock Production	3.0
AG 19 Weeds and Weed Control	3.0
AG 21 Plant Propagation	3.0
AG 22 Sustainable Vegetable Production	3.0
AG 27 Nursery Practices	3.0
AG 29 Pest Management	1.0
AG 39 Field Experience in Agriculture	1.0
AG 40 Independent Study in Agriculture	0.5-2.0
AG 63 Introduction to Sustainable Agriculture	2.0
AG 63L Introduction to Sustainable Agriculture -Lab	1.0
AG 65/65L Agriculture Enterprise Project/Lab	3.0
AG 99 Selected Topics in Agriculture	0.5-4.0
BUS 10 Introduction to Business	4.0

Staff Photo

[AG] Certificate of Achievement, Agriculture Business Management

	Units
Total Units	48.0
Program Requirements	48.0
Specific Courses	28.0
AG 17 Introduction to Soils	3.0
AG 18 Soil Fertility and Fertilizers	3.0
AG 31 Farm Business Management	3.0
AG 35 Agricultural Sales & Merchandising	3.0
AG 46 Computers in Agriculture Management	3.0
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra	3.0
BUS 10 Introduction to Business	3.0
BUS 1A Principles of Accounting	4.0
ECON 1 Macroeconomics	3.0
Additional Courses (20.0 units from the following):	20.0
AG 3 Introduction to Animal Science	3.0
AG 6 Large Animal Diseases	3.0
AG 7 Animal Feeds and Feeding	3.0
AG 11 Sustainable Livestock Production	3.0
AG 19 Weeds and Weed Control	3.0
AG 21 Plant Propagation	3.0
AG 22 Sustainable Vegetable Production	3.0
AG 27 Nursery Practices	3.0
AG 29 Pest Management	1.0
AG 39 Field Experience in Agriculture	1.0
AG 40 Independent Study in Agriculture	0.5-2.0
AG 63 Introduction to Sustainable Agriculture	2.0
AG 63L Introduction to Sustainable Agriculture -Lab	1.0
AG 65/65L Agriculture Enterprise Project/Lab	3.0
AG 99 Selected Topics in Agriculture	0.5-4.0

[AG] Certificate of Completion, Agriculture Business Management

	Units
Total Units	16.0
Program Requirements	16.0
AG 31 Farm Business Management	3.0
AG 35 Agricultural Sales & Merchandising	3.0
AG 46 Computers in Agriculture Management	3.0
BUS 1A Principles of Accounting	4.0
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra	3.0

[AG] Certificate of Completion, Animal Science

	Units
Total Units	17.0
Program Requirements	17.0
AG 3 Intro to Animal Science	3.0
AG 5 Horse Husbandry	2.0
AG 6 Large Animal Diseases	3.0
AG 7 Animal Feeds & Feeding	3.0
AG 11 Sustainable Livestock Production	3.0
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra	3.0

[AG] Associate of Science Degree, Plant Science

	Units
Total Units	60.5
General Education Requirements	18.5
Core Courses (Areas B, C, D2)	9.0
Specific Courses	9.5
AG 17 Introduction to Soils (Area A)	3.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra (Area D3)	3.0
Program Requirements	42.0
Specific Courses	25.0
AG 18 Soil Fertility and Fertilizers	3.0
AG 21 Plant Propagation	3.0
AG 23 Introduction to Plant Science	3.0
AG 27 Nursery Practices	3.0
AG 31 Farm Business Management	3.0
AG 35 Agricultural Sales and Merchandising	3.0
AG 46 Computers in Agriculture Management	3.0
BUS 1A Principles of Accounting	4.0
Additional Courses (17.0 units from the following):	17.0
AG 14 Principles of Landscape Design	3.0
AG 15 Landscape Maintenance	3.0
AG 16 Ornamental Plant Identification	3.0
AG 19 Weeds and Weed Control	3.0
AG 22 Sustainable Vegetable Production	3.0
AG 25 Landscape Construction	3.0
AG 26 Landscape Plant Identification	3.0
AG 29 Pest Management	1.0
AG 39 Field Experience in Agriculture	1.0
AG 40 Independent Study in Agriculture	0.5-2.0
AG 63 Introduction to Sustainable Agriculture	2.0
AG 63L Introduction to Sustainable Agriculture -Lab	1.0
AG 65/65L Agriculture Enterprise Project/Lab	3.0
AG 99 Selected Topics in Agriculture	0.5-4.0
BIOL 5 Introduction to Botany	4.0
FOR 51 Dendrology	2.0

[AG] Certificate of Achievement, Plant Science

	Units
Total Units	48.0
Program Requirements	48.0
Specific Courses	31.0
AG 17 Introduction to Soils	3.0
AG 18 Soil Fertility and Fertilizers	3.0
AG 21 Plant Propagation	3.0
AG 23 Introduction to Plant Science	3.0
AG 29 Pest Management	1.0
AG 31 Farm Business Management	3.0
AG 35 Agricultural Sales and Merchandising	3.0
AG 46 Computers in Agriculture Management	3.0
AG 63 Introduction to Sustainable Agriculture	2.0
BUS 1A Principles of Accounting	4.0
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra	3.0
Additional Courses (17.0 units from the following):	17.0
AG 14 Principles of Landscape Design	3.0
AG 15 Landscape Maintenance	3.0
AG 16 Ornamental Plant Identification	3.0
AG 19 Weeds and Weed Control	3.0
AG 22 Sustainable Vegetable Production	3.0
AG 25 Landscape Construction	3.0
AG 26 Landscape Plant Identification	3.0
AG 39 Field Experience in Agriculture	1.0
AG 40 Independent Study in Agriculture	0.5-2.0
AG 63L Introduction to Sustainable Agriculture Lab	1.0
AG 65/65L Agriculture Enterprise Project/Lab	3.0
AG 99 Selected Topics in Agriculture	0.5-4.0
BIOL 5 Introduction to Botany	4.0
FOR 51 Dendrology	2.0

[AG] Certificate of Achievement, Ornamental Horticulture

	Units
Total Units	49.0
Program Requirements	49.0
Specific Courses	34.0
AG 16 Ornamental Plant Identification	3.0
AG 17 Introduction to Soils	3.0
AG 18 Soil Fertility and Fertilizers	3.0
AG 21 Plant Propagation	3.0
AG 23 Introduction to Plant Science	3.0
AG 26 Landscape Plant Identification	3.0
AG 27 Nursery Practices	3.0
AG 35 Agricultural Sales and Merchandising	3.0
AG 46 Computers in Agriculture Management	3.0
BUS 1A Principles of Accounting	4.0
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra	3.0

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(continued - Cert. of Achievement Ornamental Horticulture)

Additional Courses (15.0 units from the following):	15.0
AG 14 Principles of Landscape Design	3.0
AG 15 Landscape Maintenance	3.0
AG 19 Weeds and Weed Control	3.0
AG 22 Sustainable Vegetable Production	3.0
AG 25 Landscape Construction	3.0
AG 29 Pest Management	1.0
AG 31 Farm Business Management	3.0
AG 39 Field Experience in Agriculture	1.0
AG 40 Independent Study in Agriculture	0.5-2.0
AG 63 Introduction to Sustainable Agriculture	2.0
AG 63L Introduction to Sustainable Agriculture -Lab	1.0
AG 65/65L Agriculture Enterprise Project/Lab	3.0
AG 99 Selected Topics in Agriculture	0.5-4.0
BIOL 5 Introduction to Botany	4.0
FOR 51 Dendrology	2.0

[AG] Certificate of Achievement, Sustainable Agriculture

	Units
Total Units	48.0
Program Requirements	25.0
Specific Courses	25.0
AG 11 Sustainable Animal Production	3.0
AG 17 Introduction to Soils	3.0
AG 18 Soil Fertility and Fertilizers	3.0
AG 22 Sustainable Vegetable Production	3.0
AG 29 Pest Management	1.0
AG 31 Farm Business Management	3.0
AG 46 Computers in Agriculture Management	3.0
AG 63 Introduction to Sustainable Agriculture	2.0
AG 63L Introduction to Sustainable Agriculture -Lab	1.0
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra	3.0
Additional Courses (23.0 units from the following):	23.0
AG 3 Intro to Animal Science	3.0
AG 5 Horse Husbandry	2.0
AG 6 Large Animal Diseases	3.0
AG 7 Animal Feeds & Feeding	3.0
AG 19 Weeds and Weed Control	3.0
AG 21 Plant Propagation	3.0
AG 23 Introduction to Plant Science	3.0
AG 25 Landscape Construction	3.0
AG 27 Nursery Practices	3.0
AG 35 Agricultural Sales and Merchandising	3.0
AG 39 Field Experience in Agriculture	1.0
AG 40 Independent Study in Agriculture	0.5-2.0
AG 65/65L Agriculture Enterprise Project/Lab	3.0
AG 99 Selected Topics in Agriculture	0.5-4.0
BIOL 5 Introduction to Botany	4.0
BUS 1A Principles of Accounting	4.0
FOR 51 Dendrology	2.0

[AG] Certificate of Completion, Crop Management

	Units
Total Units	18.0
Program Requirements	18.0
AG 17 Introduction to Soils	3.0
AG 18 Soil Fertility & Fertilizers	3.0
AG 19 Weeds & Weed Control	3.0
AG 22 Sustainable Vegetable Production	3.0
AG 29 Pest Management	1.0
AG 63 Intro to Sustainable Agriculture	2.0
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra	3.0

[AG] Certificate of Completion, Landscape Maintenance

	Units
Total Units	18.0
Program Requirements	18.0
AG 14 Principles of Landscape Design	3.0
AG 15 Landscape Maintenance	3.0
AG 16 Ornamental Plant Identification	3.0
AG 25 Landscape Construction	3.0
AG 26 Landscape Plant Identification	3.0
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra	3.0

[AG] Certificate of Completion, Nursery Practices

	Units
Total Units	18.0
Program Requirements	18.0
AG 16 Ornamental Plant Identification	3.0
AG 21 Plant Propagation	3.0
AG 26 Landscape Plant Identification	3.0
AG 27 Nursery Practices	3.0
AG 35 Agricultural Sales and Merchandising	3.0
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra	3.0

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AUTOMOTIVE TECHNOLOGY [AT]

Programs in this field provide basic and advanced educational opportunities for students seeking careers in the automotive service industry, including service technician, specialty technician, and parts or service manager. Specific programs include:

- Associate of Science Degree, Automotive Technology
- Certificate of Achievement, Basic Automotive Technology
- Certificate of Achievement, Advanced Automotive Technology

[AT] Associate of Science Degree, Automotive Technology

	Units
Total Units	61.0
General Education Requirements	18.0
Core Courses (Areas A, B, C, D1, D2)	15.0
Specific Courses	3.0
IT 161 Technical Mathematics (Area D3)	3.0
Program Requirements	43.0
AT 12 Automotive Braking Systems	4.0
AT 14 Manual Transmission/Transaxle & Drive Train	4.0
AT 16 Automotive Electrical Systems	4.0
AT 18 Automotive Engine Repair	4.0
AT 20 Automotive Suspension & Steering Systems	4.0
AT 22 Automotive Electronics	4.0
AT 24 Engine performance	4.0
AT 26 Automotive Air Conditioning & Heating	4.0
AT 28 Advanced Engine Performance	4.0
AT 30 Automatic Transmission/Transaxle	4.0
IT 25 Occupational Safety & Health Management	3.0

[AT] Certificate of Achievement, Basic Automotive Technology

	Units
Total Units	23.0
Program Requirements	23.0
AT 12 Automotive Braking Systems	4.0
AT 14 Manual Transmission/Transaxle & Drive Train	4.0
AT 16 Automotive Electrical Systems	4.0
AT 18 Automotive Engine Repair	4.0
AT 20 Automotive Suspension & Steering Systems	4.0
IT 161 Technical Mathematics	3.0

[AT] Certificate of Achievement, Advanced Automotive Technology

	Units
Total Units	46.0
Program Requirements	46.0
AT 12 Automotive Braking Systems	4.0
AT 14 Manual Transmission/Transaxle & Drive Train	4.0
AT 16 Automotive Electrical Systems	4.0
AT 18 Automotive Engine Repair	4.0
AT 20 Automotive Suspension & Steering Systems	4.0
AT 22 Automotive Electronics	4.0
AT 24 Engine Performance	4.0
AT 26 Automotive Air Conditioning & Heating	4.0
AT 28 Advanced Engine Performance	4.0
AT 30 Automatic Transmission/Transaxle	4.0
IT 161 Technical Mathematics	3.0
IT 25 Occupational Safety & Health Management	3.0

BUSINESS [BUS]

Programs in this field provide general and specific educational opportunities for students seeking careers in a broad variety of business settings related to management, operations, and technical support. Specific programs include:

- Associate of Science Degree, General Business
- Associate of Science Degree, Computer Applications and Office Systems
- Associate of Science Degree, Legal Secretarial
- Certificate of Achievement, General Business
- Certificate of Achievement, Legal Secretarial
- Certificate of Completion, Bookkeeping
- Certificate of Completion, Desktop Publishing
- Certificate of Completion, Income Tax Preparation
- Certificate of Completion, Office Skills
- Certificate of Completion, Office Technology
- Certificate of Completion, Payroll Clerk
- Certificate of Completion, Word Processing

[BUS] Associate of Science Degree, General Business

	Units
Total Units	60.0
General Education Requirements	18.0
Core Courses (Areas A, C, D1, D2)	12.0
Specific Courses	6.0
BUS 10 Introduction to Business (Area B)	3.0
BUS 94 Business Math (Area D3)	3.0

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(continued - A.S. Degree General Business)

Program Requirements	39.0
Specific Courses	29.0
BUS 1A/1B Principles of Accounting	8.0
BUS 18 Business Law	3.0
BUS 35 Marketing	3.0
BUS 52 Business Communications	3.0
BUS 69 Small Business Entrepreneurship	3.0
CIS 1/1L Computer Literacy/Lab	3.0
ECON 1 Macroeconomics	3.0
ECON 10 Microeconomics	3.0
Additional Courses (10.0 units from the following):	10.0
BUS 16/16L Word Processing I/Lab	4.0
BUS 17/17L Word Processing II/Lab	4.0
BUS 33 International Business	3.0
BUS 64 Advertising	3.0
BUS 68 Introduction to Principles of Management	3.0
CIS 3 Problem Solving for Applications	3.0
CIS 50/50L Database Applications/Lab	4.0
CIS 53/53L Spreadsheet Applications/Lab	4.0
RE 10 Principles of Real Estate	3.0
Electives	3.0

[AG] Certificate of Achievement, General Business

	Units
Total Units	45.0
Program Requirements	45.0
Specific Courses	35.0
BUS 10 Introduction to Business	3.0
BUS 94 Business Math	3.0
ECON 1 Macroeconomics	3.0
ECON 10 Microeconomics	3.0
BUS 1A/1B Principles of Accounting	8.0
BUS 18 Business Law	3.0
BUS 35 Marketing	3.0
BUS 52 Business Communications	3.0
BUS 69 Small Business Entrepreneurship	3.0
CIS 1/1L Computer Literacy/Lab	3.0
Additional Courses (10.0 units from the following):	10.0
BUS 16/16L Word Processing I/Lab	4.0
BUS 17/17L Word Processing II/Lab	4.0
BUS 33 International Business	3.0
BUS 64 Advertising	3.0
BUS 68 Introduction to Principles of Management	3.0
CIS 3 Problem Solving for Applications	3.0
CIS 50/50L Database Applications/Lab	4.0
CIS 53/53L Spreadsheet Applications/Lab	4.0
RE 10 Principles of Real Estate	3.0

Photo: Computer Consulting Services

[BUS] Associate of Science Degree, Computer Applications and Office Systems

	Units
Total Units	60.0
General Education Requirements	18.0
Core Courses (Areas A, C, D2)	9.0
Specific Courses	9.0
BUS 10 Introduction to Business (Area B)	3.0
BUS 94 Business Math (Area D3)	3.0
BUS 152 Business English (Area D1)	3.0
Program Requirements	42.0
Specific Courses	34.0
BUS 12 Keyboarding Skill Development	1.0
BUS 16/16L Word Processing I/Lab	4.0
BUS 17/17L Word Processing II/Lab	4.0
BUS 53/53L Managing Office Information Systems	4.0
CIS 1/1L Computer Literacy/Lab	3.0
CIS 3 Problem Solving for Applications	3.0
CIS 50/50L Database Applications/Lab	4.0
CIS 53/53L Spreadsheet Applications/Lab	4.0
CIS 70/70L Business Computer Systems Analysis/Lab	6.0
CIS 80 Introduction to Windows	0.5
CIS 83 Guide to the Information Highway	0.5
Additional Courses (8.0 units from the following):	8.0
BUS 1A Principles of Accounting	4.0
BUS 1B Principles of Accounting	4.0
BUS 52 Business Communications	3.0
BUS 63/63L Desktop Publishing Applications/Lab	4.0
CIS 16/16L Object-oriented programming C++/Lab	4.0
CIS 18/18L Visual Basic Programming/Lab	4.0
CIS 30/30L Intro to Data Comm & Network Management/Lab	4.0
CIS 77 Introduction to PC and MS-DOS	0.5
CIS 78 Introduction to Programming	0.5
CIS 85 JavaScript	0.5
CIS 98/98L PC Computer Repair & Maintenance/Lab	4.0
DM 10/10L Multimedia Literacy/Lab	4.0

[BUS] Associate of Science Degree, Legal Secretary

	Units
Total Units	63.0
General Education Requirements	18.0
Core Courses (Areas A, B, C, D2, D3)	15.0
Specific Courses	3.0
BUS 152 Business English (Area D1)	3.0
Program Requirements	45.0
Specific Courses	36.0
BUS 5 Business Document Transcription	0.5
BUS 7 Legal Document Transcription	0.5
BUS 16/16L Word Processing I/Lab	4.0
BUS 18 or LEGL 41 Business Law or Introduction to Law	3.0
BUS 52 Business Communication	3.0
BUS 53/53L Managing Office Information Systems/Lab	4.0
BUS 94 Business Math	3.0
BUS 111 Office Communication Skills for Career	1.0
BUS 113 Managing the Office Environment	1.0
BUS 119T Legal Terminology	2.0
BUS 119V Business Word Building	2.0
BUS 121 Probate Law Documentation	0.5
BUS 122 Family Law Documentation	0.5
BUS 123 Civil Law Documentation	0.5
BUS 125 Unlawful Detainer Documents	0.5
BUS 156 Legal Office Procedures	5.0
BUS 168 Editing Skills	1.0
BUS 169 Proofreading	1.0
CIS 1/1L Computer Literacy/Lab	3.0
Additional Courses (9.0 units from the following):	9.0
BUS 1A Principles of Accounting	3.0
BUS 2 Automated Accounting	1.0
BUS 11 Keyboarding & Typing	3.0
BUS 12 Keyboarding & Typing Skill Development	1.0
BUS 17/17L Word Processing II/Lab	4.0
CIS 3 Problem Solving	3.0
CIS 50/50L Database Applications/Lab	4.0
CIS 80 Introduction to Windows	0.5
CIS 81 Introduction to Micro Applications	0.5

[BUS] Certificate of Achievement, Legal Secretary

	Units
Total Units	48.0
Program Requirements	48.0
Specific Courses	39.0
BUS 5 Business Document Transcription	0.5
BUS 7 Legal Document Transcription	0.5
BUS 16/16L Word Processing I/Lab	4.0
BUS 18 or LEGL 141 Business Law or Introduction to Law	3.0
BUS 52 Business Communication	3.0
BUS 53/53L Managing Office Information Systems/Lab	4.0

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(continued - Cert. of Achievement Legal Secretary)

BUS 94 Business Math	3.0
BUS 111 Office Communication Skills for Career	1.0
BUS 113 Managing the Office Environment	1.0
BUS 119T Legal Terminology	2.0
BUS 119V Business Word Building	2.0
BUS 121 Probate Law Documentation	0.5
BUS 122 Family Law Documentation	0.5
BUS 123 Civil Law Documentation	0.5
BUS 125 Unlawful Detainer Documents	0.5
BUS 152 Business English	3.0
BUS 156 Legal Office Procedures	5.0
BUS 168 Editing Skills	1.0
BUS 169 Proofreading	1.0
CIS 1/1L Computer Literacy/Lab	3.0
Additional Courses (9.0 units from the following):	9.0
BUS 1A Principles of Accounting	3.0
BUS 2 Automated Accounting	1.0
BUS 11 Keyboarding & Typing	3.0
BUS 12 Keyboarding & Typing Skill Development	1.0
BUS 17/17L Word Processing II/Lab	4.0
CIS 3 Problem Solving	3.0
CIS 50/50L Database Applications/Lab	4.0
CIS 80 Introduction to Windows	0.5
CIS 81 Introduction to Micro Applications	0.5

[BUS] Certificate of Completion, Word Processing

	Units
Total Units	13.0
Program Requirements	13.0
BUS 12 Keyboarding Skill Development	1.0
BUS 16/16L or BUS 17/17L Word Processing I/Lab or Word Processing II/Lab	4.0
BUS 17/17L Word Processing II/Lab	4.0
BUS 152 or ENGL 150 Business English or College Reading & Writing	3.0
BUS 162 Programmed Machine Transcription	1.0

[BUS] Certificate of Completion, Desktop Publishing

	Units
Total Units	17.5
Program Requirements	17.5
BUS 12 Keyboarding Skill Development	1.0
BUS 16/16L Word Processing I/Lab	4.0
BUS 17/17L Word Processing II/Lab	4.0
BUS 63/63L Desktop Publishing Applications	4.0
BUS 152 or ENGL 150 Business English or College Reading & Writing	3.0
BUS 162 Programmed Machine Transcription	1.0
DM 70A Introduction to Adobe Photoshop	0.5

Stock Photo

[BUS] Certificate of Completion, Income Tax Preparation

	Units
Total Unit	10.5
Program Requirements	10.5
BUS 81A Individual Income Tax Law	4.0
BUS 81B Corporate and Partnership Income Law	4.0
BUS 82 Federal Income Tax Preparation	1.5
LEGL 155 Law Practicum	1.0

[BUS] Certificate of Completion, General Office Technology

	Units
Total Units	14.5
Program Requirements	14.5
BUS 11 Keyboarding & Typing	3.0
BUS 12 Keyboarding & Typing Skill Development	1.0
BUS 111 Office Communications Skills—Career Success	1.0
BUS 113 Managing—Office Environment	1.0
BUS 119V Business Word Building	2.0
BUS 150B Business Vocabulary	2.0
BUS 150S Spelling	1.0
CIS 1/1L Computer Literacy/Lab	3.0
CIS 86 HTML Web Page Design	0.5

[BUS] Certificate of Completion, Basic Office Skills

	Units
Total Units	7.5
Program Requirements	7.5
BUS 11 Keyboarding & Typing	3.0
BUS 111 Office Communication Skills—Career Success	1.0
BUS 113 Managing—Office Environment	1.0
BUS 150B Business Vocabulary (1.0-2.0 units)	1.0
CIS 80 Introduction to Windows	0.5
CIS 81 Introduction to Micro Applications	0.5
CIS 83 Guide to the Information Highway	0.5

[BUS] Certificate of Completion, Payroll Clerk

	Units
Total Units	12.0
Program Requirements	12.0
Specific Courses	10.5
BUS 10 General Business	3.0
BUS 11 or BUS 12 Keyboarding & Typing/Keyboarding Skill Development	1.0
BUS 94 Business Math	3.0
BUS 180 Basic Bookkeeping	3.0
CIS 90 Introduction to Spreadsheets	0.5
Additional Courses (1.5 units from the following):	1.5
CIS 80 Introduction to Windows	0.5
CIS 81 Introduction to Micro Applications	0.5
CIS 83 Guide to the Information Highway	0.5
CIS 1/1L Computer Literacy	3.0
CIS 2/2L Beyond Computer Literacy	4.0

[BUS] Certificate of Completion, Bookkeeping

	Units
Total Units	27.0
Program Requirements	27.0
Specific Courses	23.5
BUS 10 General Business	3.0
BUS 11 or BUS 12 Keyboarding & Typing/Keyboard Skill Development	1.0
BUS 94 Business Math	3.0
BUS 180 Basic Bookkeeping	3.0
CIS 90 Introduction to Spreadsheets	0.5
BUS 4 Computerized Bookkeeping	3.0
BUS 52 Business Communications	3.0
BUS 65/65L or CIS 53/53L Intro to E-commerce or Spreadsheet Applications	4.0
BUS 69 Small Business Entrepreneurship	3.0
Additional Courses (1.5 units from the following):	1.5
CIS 80 Introduction to Windows	0.5
CIS 81 Introduction to Micro Applications	0.5
CIS 83 Guide to the Information Highway	0.5
CIS 1/1L Computer Literacy	3.0
CIS 2/2L Beyond Computer Literacy	4.0
Additional Courses (2.0 units from the following):	2.0
BUS 111 Office Communication Skills	1.0
BUS 113 Managing—Office Environment	1.0
BUS 53/53L Managing Office Information Systems/Lab	4.0

COMPUTER ELECTRONICS TECHNOLOGY [CET]

Programs in this field provide educational opportunities for students seeking careers in computer manufacturing, sales, maintenance, repair, and networking. Specific programs include:

- Associate of Science Degree, Electronics Technology
- Associate of Science Degree, Computer Maintenance and Networking
- Certificate of Achievement, Electronics Technology
- Certificate of Achievement, Computer Maintenance and Networking
- Certificate of Completion, Electronics Technology
- Certificate of Completion, Computer Maintenance and Networking

[CET] Associate of Science Degree, Computer Maintenance and Networking

	Units
Total Units	60.5
General Education Requirements	18.5
Core Courses (Areas B, C, and D2)	9.0
Specific Courses	9.5
CET 10 Survey of Electronics (Area A)	3.0
IT 62 Technical Mathematics (Area D3)	3.0
ENGL 150/150L College Reading and Writing/Lab (Area D1)	3.5
Program Requirements	42.0
Specific Courses	28.0
CIS 11 Introduction to Computer Information Systems	3.0
CIS 77 Introduction to PC and MS-DOS	0.5
CIS 80 Introduction to Windows	0.5
CET 10L Survey of Electronics Lab	1.0
CIS 12 Problem Solving for Computer Info Systems	3.0
CIS 16/16L Object-oriented Programming C++/Lab	4.0
CIS 30/30L Introduction to Data Communications/Network/Lab	4.0
CIS 31/31L Network Operating Systems	4.0
CIS 32/32L Router Theory and Technology	4.0
CIS 98/98L PC Computer Repair & Maintenance	4.0
Additional Courses (14.0 units from the following list):	14.0
CIS 18/18L Visual Basic Programming	4.0
CIS 20 Programming with Data Structures	4.0
CIS 22 Server Side Programming	4.0
CIS 50 Database Applications	4.0
CIS 53 Spreadsheet Applications	4.0
CIS 70 Systems Analysis and Design	6.0
DT 25 CADD Fundamentals	3.0
ENGR 23 Engineering Graphics	3.0

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(continued - A.S. Degree Computer Maintenance and Networking)

PHYS 10 Introduction to Physics	3.0
PHYS 4A Engineering Physics	4.0
CHEM 2 Introduction to Chemistry	5.0
MT 54A Computer Numerical Control Machining	4.0
MT 62A Machine Shop Procedures	3.0

[CET] Certificate of Achievement, Computer Maintenance and Networking

	Units
Total Units	26.0
Program Requirements	26.0
CET 10 Survey of Electronics	3.0
IT 62 Technical Mathematics	3.0
CIS 11 Introduction to Computer Information Systems	3.0
CIS 77 Introduction to PC and MS-DOS	0.5
CIS 80 Introduction to Windows	0.5
CET 10L Survey of Electronics Lab	1.0
CIS 12 Problem Solving for Computer Info Systems	3.0
CIS 16/16L Object-oriented Programming C++/Lab	4.0
CIS 30/30L Introduction to Data Communications/Network/Lab	4.0
CIS 98/98L PC Computer Repair & Maintenance	4.0

[CET] Certificate of Completion, Computer Maintenance and Networking

	Units
Total Units	13.0
Program Requirements	13.0
CIS 77 Introduction to PC and MS-DOS	0.5
CIS 80 Introduction to Windows	0.5
CET 10 Survey of Electronics	3.0
CET 10L Survey of Electronics Lab	1.0
CIS 30/30L Introduction to Data Communications/Network/Lab	4.0
CIS 98/98L PC Computer Repair & Maintenance	4.0

Photo: Paul DeMark

[CET] Associate of Science Degree, Electronics Technology

	Units
Total Units	60.5
General Education Requirements	18.5
Core Courses (Areas B, C, D2)	9.0
Specific Courses	9.5
CET 10 Survey of Electronics (Area A)	3.0
IT 62 Technical Mathematics (Area D3)	3.0
ENGL 150/150L College Reading and Writing/Lab (Area D1)	3.5
Program Requirements	42.0
Specific Courses	22.0
CIS 11 Introduction to Computer Information Systems	3.0
CIS 77 Introduction to PC and MS-DOS	0.5
CIS 80 Introduction to Windows	0.5
CET 10L Survey of Electronics Lab	1.0
CET 41/41L Electronic Fundamentals I	4.0
CET 42/42L Electronic Fundamentals II	4.0
CET 43/43L Digital & Microprocessor Fundamentals	4.0
CET 149 Electronics Project Construction	2.0
CET 170 Industrial Electronics	3.0
Additional Courses (20.0 units from the following):	20.0
CIS 12 Problem Solving for Computer Information Systems	3.0
CIS 16/16L Object Oriented Programming with C++	4.0
CIS 30/30L Introduction to Data Communications & Network Management	4.0
CIS 98/98L Personal Computer Repair and Maintenance	4.0
CIS 18/18L Visual Basic Programming	4.0
CIS 31/31L Network Operating Systems	4.0
CIS 70 Systems Analysis and Design	6.0
DT 25 CADD Fundamentals	3.0
ENGR 23 Engineering Graphics	3.0
PHYS 10 Introduction to Physics	3.0
PHYS 4A Engineering Physics	4.0
CHEM 2 Introduction to Chemistry	5.0
MT 54 Computer Numerical Control Machining	4.0
MT 61 Machine Tool Technology	6.0
MT 62 Machine Shop Procedures	3.0

Photo: Paul DeMark

[CET] Certificate of Achievement, Electronics Technology

	Units
Total Units	28.0
Program Requirements	28.0
CET 10 Survey of Electronics	3.0
IT 62 Technical Mathematics	3.0
CIS 11 Introduction to Computer Information Systems	3.0
CIS 77 Introduction to PC and MS-DOS	0.5
CIS 80 Introduction to Windows	0.5
CET 10L Survey of Electronics Lab	1.0
CET 41/41L Electronic Fundamentals I	4.0
CET 42/42L Electronic Fundamentals II	4.0
CET 43/43L Digital & Microprocessor Fundamentals	4.0
CET 149 Electronics Project Construction	2.0
CET 170 Industrial Electronics	3.0

[CET] Certificate of Completion, Electronics Technology

	Units
Total Units	22.0
Program Requirements	22.0
CIS 77 Introduction to PC and MS-DOS	0.5
CIS 80 Introduction to Windows	0.5
CET 10 Survey of Electronics	3.0
CET 10L Survey of Electronics Lab	1.0
CET 41/41L Electronic Fundamentals I	4.0
CET 42/42L Electronic Fundamentals II	4.0
CET 43/43L Digital & Microprocessor Fundamentals	4.0
CET 149 Electronics Project Construction	2.0
CET 170 Industrial Electronics	3.0

COMPUTER INFORMATION SYSTEMS [CIS]

This degree program provides educational opportunities for students seeking careers related to computer systems, languages, analysis, and programming. Specific programs include:

- Associate of Science Degree, Computer Programming

[CIS] Associate of Science Degree, Computer Programming

	Units
Total Units	60.0
General Education Requirements	18.0
Core Courses (Areas A, B, C, D1)	12.0
Specific Courses	6.0
BUS 94 or MATH 21 Business Mathematics or Finite Mathematics (Area D3)	3.0
SPCH 1 or 1H Public Speaking (Area D2)	3.0
Program Requirements	42.0
Specific Courses	32.0
CIS 11 Introduction to Computer Information Systems	3.0
CIS 12 Problem Solving for Computer Information Systems	3.0
CIS 16/16L Object-oriented Programming C++/Lab	4.0
CIS 18/18L Visual Basic Programming/Lab	4.0
CIS 20/20L Programming with Data Structures/Lab	4.0
CIS 30/30L Networking Essentials/Lab	4.0
CIS 50/50L Database Applications/Lab	4.0
CIS 70/70L Systems Analysis & Design/Lab	6.0
Additional Courses (2.0 units from the following):	2.0
CIS 77 Introduction to PC and MS-DOS	0.5
CIS 78 Introduction to Programming	0.5
CIS 80 Introduction to Windows	0.5
CIS 81 Introduction to Micro Applications	0.5
CIS 83 Guide to the Information Highway	0.5
CIS 85 Introduction to Java Script	0.5
CIS 86 HTML Web Page Design	0.5
CIS 90 Introduction to MS Excel	0.5
Additional Courses (8.0 units from the following):	8.0
CIS 22/22L Server-side Web Programming/Lab	4.0
CIS 31/31L Network Operating Systems/Lab	4.0
CIS 32/32L Router Theory and Technology/Lab	4.0
CIS 53/53L Spreadsheet Applications/Lab	4.0
BUS 63/63L Desktop Publishing Applications/Lab	4.0
DM 10/10L Multimedia Literacy/Lab	4.0

CONSTRUCTION TECHNOLOGY [CT]

Programs in this field provide general and specific educational opportunities for students seeking careers related to residential and commercial building construction, historic preservation and restoration, and practical and artistic woodworking skills and techniques. Specific programs include:

- Associate of Science Degree, Construction Technology
- Associate of Science Degree, Historic Preservation and Restoration
- Certificate of Achievement, Fine Woodworking
- Certificate of Achievement, Advanced Fine Woodworking
- Certificate of Achievement, Residential Construction
- Certificate of Achievement, Advanced Residential Construction
- Certificate of Completion, Cabinetmaking and Millwork
- Certificate of Completion, Historic Preservation and Restoration
- Certificate of Completion, Residential Wiring

[CT] Associate of Science Degree, Construction Technology

	Units
Total Units	67.0
General Education Requirements	18.5
Core Courses (Areas A, B, C, D2)	12.0
Specific Courses	6.5
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 161 Technical Mathematics (Area D3)	3.0
Program Requirements	48.5
CT 21A Introduction to Woodworking	3.0
CT 50 Construction Estimating	4.0
CT 56 Construction Layout	2.5
CT 57A Cabinetmaking & Millwork I	3.0
CT 57B Cabinetmaking & Millwork II	3.0
CT 70 Building Codes & Standards	2.0
CT 80 Carpentry Theory I	3.0
CT 81 Carpentry Theory II	3.0
CT 90 Beginning Carpentry I	3.0
CT 91 Beginning Carpentry II	3.0
CT 95 Intermediate Carpentry I	3.0
CT 96 Intermediate Carpentry II	3.0
DT 25 CADD Fundamentals	4.0
DT 71 Architectural Drafting Techniques	3.0
DT 73 Residential Design	3.0
IT 46 Computers in Industrial Management	3.0

[CT] Certificate of Achievement, Residential Construction I

	Units
Total Units	26.5
Program Requirements	26.5
CT 21A Introduction to Woodworking	3.0
CT 56 Construction Layout	2.5
CT 57A Cabinetmaking & Millwork I	3.0
CT 57B Cabinetmaking & Millwork II	3.0
CT 80 Carpentry Theory I	3.0
CT 81 Carpentry Theory II	3.0
CT 90 Beginning Carpentry I	3.0
CT 91 Beginning Carpentry II	3.0
IT 46 Computers in Industrial Management	3.0

[CT] Certificate of Achievement, Residential Construction II

	Units
Total Units	51.5
Program Requirements	51.5
CT 21A Introduction to Woodworking	3.0
CT 56 Construction Layout	2.5
CT 57A Cabinetmaking & Millwork I	3.0
CT 57B Cabinetmaking & Millwork II	3.0
CT 80 Carpentry Theory I	3.0
CT 81 Carpentry Theory II	3.0
CT 90 Beginning Carpentry I	3.0
CT 91 Beginning Carpentry II	3.0
IT 46 Computers in Industrial Management	3.0
CT 50 Construction Estimating	4.0
CT 70 Building Codes & Standards	2.0
CT 95 Intermediate Carpentry I	3.0
CT 96 Intermediate Carpentry II	3.0
DT 25 CADD Fundamentals	4.0
DT 71 Architectural Drafting Techniques	3.0
DT 73 Residential Design	3.0
IT 161 Technical Mathematics	3.0

[CT] Certificate of Completion, Residential Wiring

	Units
Total Units	10.0
Program Requirements	10.0
CT 78A Residential Wiring I	2.0
CT 78B Residential Wiring II	2.0
CT 78C Residential Wiring III	4.0
CT 72 Electrical Codes and Standards	2.0

[CT] Certificate of Completion, Cabinetmaking and Millwork

	Units
Total Units	18.0
Program Requirements	18.0
Specific Courses	15.0
CT 21A Introduction to Woodworking	3.0
CT 21B Intermediate Woodworking	3.0
CT 57A Cabinetmaking and Millwork I	3.0
CT 57B Cabinetmaking and Millwork II	3.0
CT 57C Cabinetmaking and Millwork III	3.0
Additional Courses (3.0 units from the following):	3.0
CT 16 Architectural Millwork	3.0
CT 57C Cabinetmaking and Millwork III	3.0

[CT] Associate of Science Degree, Historic Preservation and Restoration

	Units
Total Units	60.0
General Education Requirements	18.5
Core Requirements (area A, B, C and D2)	12.0
Specific Requirements	6.5
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra (Area D3)	3.0
Program Requirements	41.0
Specific Courses	33.0
CT 10 Intro to Historic Preservation and Restoration	3.0
CT 11 Architectural History	3.0
CT 12 Historic Research and Documentation	3.0
CT 13 Historic Building Analysis	3.0
CT 15 Field Techniques for Historic Preservation	3.0
CT 16 Architectural Millwork	3.0
CT 21A Introduction to Woodworking	3.0
CT 80 Carpentry Theory I	3.0
CT 90 Beginning Carpentry I	3.0
ENGR 23 Engineering Graphics	3.0
IT 25 Occupational Safety and Health Management	3.0
Additional Courses (8.0 units from the following):	8.0
CT 2 Material Science: Wood	2.0
CT 3 Material Science: Masonry/Plaster	2.0
CT 4 Material Science: Interior Surface Materials	2.0
CT 7 Material Science: Glass	2.0
CT 8 Material Science: Cast and Mold Making	2.0
Electives	0.5

[CT] Certificate of Completion, Historic Preservation & Restoration

	Units
Total Units	16.0
Program Requirements	16.0
Specific Courses	12.0
CT 10 Introduction to Historic Preservation and Restoration	3.0
CT 12 Historic Research & Documentation	3.0
CT 15 Field Techniques for Historic Preservation	3.0
CT 16 Architectural Millwork	3.0
Additional Courses (4.0 units from the following):	4.0
CT 2 Material Science: Wood	2.0
CT 3 Material Science: Masonry/Plaster	2.0
CT 4 Material Science: Interior Surface Materials	2.0
CT 7 Material Science: Glass	2.0
CT 8 Material Science: Cast and Mold Making	2.0

[CT] Certificate of Achievement, Fine Woodworking I

	Units
Total Units	36.0
Program Requirements	36.0
CT 130A Fine Woodworking Theory & Practice	18.0
CT 130B Fine Woodworking Theory & Practice	18.0

[CT] Certificate of Achievement, Fine Woodworking II

	Units
Total Units	68.0
Program Requirements	68.0
CT 130A Fine Woodworking Theory & Practice	18.0
CT 130B Fine Woodworking Theory & Practice	18.0
CT 133A Fine Woodworking Special Studies	16.0
CT 133B Fine Woodworking Special Studies	16.0

COURT REPORTING [CR]

This certificate prepares students for taking the state-administered Certified Shorthand Reporter exam for a career as a certified court reporter in the state of California.

[CR] Certificate of Achievement, Court Reporting

	Units
Total Units	40.0
Program Requirements	40.0
Specific Courses	37.0
BIOL 8 Human Biology	3.0
BUS 119T Legal Terminology	2.0
BUS 119V Business Word Building	2.0
BUS 150B Business Vocabulary	1.0
BUS 152 Business English	3.0
BUS 157 Legal Office Procedures	3.0
CIS 1/1L Computer Literacy/Lab	3.0
CR 119C Court Reporting Practicum Observation	1.0
CR 119P Reporting Procedures & Records	3.0
CR 119R CSR-RPR Examination Review	1.0
CR 120/120L Manual & Computer Transcription/Lab	2.0
CR 124/124L Touch Shorthand Theory/Lab	4.0
CR 150G Punctuation of the Spoken Word	1.0
CR 150L CSR-RPR Licensure Lab I	2.0
LEGL 41 or BUS 18 Introduction to Law or Business Law	3.0
MA 152 Medical Terminology	3.0
Additional Courses (3.0 units from the following):	3.0
BUS 150S Spelling	1.0
BUS 168 Business Document Preparation—Editing	1.0
BUS 169 Business Document Preparation—Proofreading	1.0
ENGL 1A English Composition	3.0
ENGL 5 Word Origins	3.0

Photo's: Bosha Struve

Best of Show "Isis-Curio Cabinet with Wings" by Farbice Landa

"Cedar Waxwings" carved by Linda Smith.

Look for the 15th Annual Celebration of Wood - July 2004 at College of the Redwoods

2004 WoodFair

A Celebration of the North Coast's Woodworking Tradition

First place -"Sax Player" by Rip Kirby.

DENTAL ASSISTING [DA]

Programs in this field prepare students for careers as dental assistants and for successful completion of the Registered Dental Assistant and Certified Dental Assistant Examinations. Specific Programs include:

- Associate of Science Degree, Dental Assisting
- Certificate of Achievement, Dental Assisting

Note: For Dental Assisting program progression and completion, a grade of "C" or better is required in all courses. For information on program prerequisites and special application procedures, contact the Health Occupations Office or the department web page at: www.redwoods.edu/departments/HO/programs.htm

DA] Associate of Science Degree, Dental Assisting

	Units
Total Units	60.0
Prerequisite: Eligibility for enrollment in ENGL 150	
General Education Requirements	18.0
Core Courses (Areas A, B, C, D1, D3)	15.0
Specific Courses	3.0
SPCH 7 Interpersonal Communications (Area D2)	3.0
Program Requirements	29.0
DA 153 Dental Science I	2.0
DA 154 Dental Materials & Lab Procedures	3.0
DA 155 Dental Radiography I	2.0
DA 156 Introduction to Chairside	4.0
DA 163 Dental Science II	3.0
DA 164 Dental Specialties-Expanded Duties	3.0
DA 165 Dental Radiography II	2.0
DA 166 Dental Assisting Office Management	1.0
DA 167 Dental Clinical Experience	6.0
HO 15 Nutrition	3.0
Electives	13.0

[DA] Certificate of Achievement, Dental Assisting

	Units
Total Units	32.0
Prerequisite: Eligibility for enrollment in ENGL 150	
Program Requirements	32.0
DA 153 Dental Science I	2.0
DA 154 Dental Materials & Lab Procedures	3.0
DA 155 Dental Radiography I	2.0
DA 156 Introduction to Chairside	4.0
DA 163 Dental Science II	3.0

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(continued - Certificate of Achievement, Dental Assisting)

DA 164 Dental Specialties-Expanded Duties	3.0
DA 165 Dental Radiography II	2.0
DA 166 Dental Assisting Office Management	1.0
DA 167 Dental Clinical Experience	6.0
HO 15 Nutrition	3.0
SPCH 7 Interpersonal Communications	3.0

DIESEL HEAVY EQUIPMENT TECHNOLOGY [DHET]

Programs in this field provide general and specific educational opportunities for students seeking careers related to the maintenance and operation of diesel equipment. Specific programs include:

- Associate of Science, Diesel Heavy Equipment Technology
- Certificate of Achievement, Diesel Heavy Equipment Technology
- Certificate of Completion, Diesel Engine Overhaul
- Certificate of Completion, Diesel Fuel Injection
- Certificate of Completion, Diesel Electrical System
- Certificate of Completion, Diesel Power Train
- Certificate of Completion, Diesel Truck Maintenance

[DHET] Associate of Science Degree, Diesel Heavy Equipment Technology

	Units
Total Units	60.5
General Education Requirements	18.5
Core Courses (Areas B, C, D2)	9.0
Specific Courses	9.5
CET 10 Survey of Electronics (Area A)	3.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 62 Technical Mathematics (Area D3)	3.0
Program Requirements	42.0
CET 10L Survey of Electronics/Lab	1.0
AT 16 Automotive Electrical Systems	4.0
DHET 54 Diesel Engine Theory	4.0
DHET 59 Diesel Fuel Systems	3.0
DHET 63 Gear Theory & Transmissions	3.0
DHET 64 Gear Theory & Rear Differentials	3.0
DHET 66 Diesel Engine Performance & Analysis	4.0
DHET 149 Truck Maintenance & Compliance	3.0
DHET 150 Power-assisted Brakes	3.0
DHET 167 Hydraulics & Pneumatics	3.0
IT 25 Occupational Safety & Health Management	3.0
IT 46 Computers in Industrial Management	3.0
MT 62A Machine Shop Procedures	3.0
WT 53 Welding Procedures	2.0

[DHET] Certificate of Achievement, Diesel Heavy Equipment Technology

	Units
Total Units	39.0
Program Requirements	39.0
CET 10 Survey of Electronics	3.0
CET 10L Survey of Electronics Lab	1.0
AT 16 Automotive Electrical Systems	4.0
DHET 54 Diesel Engine Theory	4.0
DHET 59 Diesel Fuel Systems	3.0
DHET 63 Gear Theory & Transmissions	3.0
DHET 64 Gear Theory & Rear Differentials	3.0
DHET 66 Diesel Engine Performance & Analysis	4.0
DHET 149 Truck Maintenance & Compliance	3.0
DHET 150 Power-assisted Brakes	3.0
DHET 167 Hydraulics & Pneumatics	3.0
IT 25 Occupational Safety & Health Management	3.0
WT 53 Welding Procedures	2.0

[DHET] Certificate of Completion, Diesel Engine Overhaul

	Units
Total Units	15.0
Program Requirements	15.0
CET 10 Survey of Electronics	3.0
CET 10L Survey of Electronics Lab	1.0
DHET 54 Diesel Engine Theory	4.0
DHET 59 Diesel Fuel Systems	3.0
DHET 66 Diesel Engine Performance & Analysis	4.0

[DHET] Certificate of Completion, Diesel Truck Maintenance

	Units
Total Units	8.0
Program Requirements	8.0
DHET 150 Power-assisted Brakes	3.0
DHET 149 Truck Maintenance & Compliance	3.0
WT 53 Welding Procedures	2.0

[DHET] Certificate of Completion, Diesel Electrical System

	Units
Total Units	8.0
Program Requirements	8.0
CET 10 Survey of Electronics	3.0
CET 10L Survey of Electronics Lab	1.0
AT 16 Automotive Electrical Systems	4.0

[DHET] Certificate of Completion, Diesel Power Train

	Units
Total Units	6.0
Program Requirements	6.0
DHET 63 Gear Theory & Transmissions	3.0
DHET 64 Gear Theory & Rear Differentials	3.0

[DHET] Certificate of Completion, Diesel Fuel Injection

	Units
Total Units	7.0
Program Requirements	7.0
DHET 54 Diesel Engine Theory	4.0
DHET 59 Diesel Fuel Systems	3.0

DIGITAL MEDIA [DM]

Programs in this field provide general and specific educational opportunities for students seeking careers related to digital media creation and development, including audio, video, graphics, animation, and applications. Specific programs include:

- Associate of Science Degree, Digital Media
- Certificate of Achievement, Digital Media
- Certificate of Achievement, Animation
- Certificate of Achievement, Internet Design

[DM] Associate of Science Degree, Digital Media

	Units
Total Units	61.0
General Education Requirements	18.5
Core Courses (Areas A. B, D3)	9.0
Specific Courses	9.5
ART 10 Color & Design (Area C)	3.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
SPCH 1 Public Speaking (Area D2)	3.0
Program Requirements	42.5
Specific Courses	40.0
ART 17 Drawing	3.0
BUS 63/63L Desktop Publishing Applications	4.0
CIS 1/1L or CIS 2/2L Computer Literacy / Beyond Computer Literacy	3.0
CIS 71 Community Projects	2.0
CIS 78 Introduction to Programming	0.5
DT 24 CAD Graphics	0.5
DT 80 Modeling & Animation	4.0
JOURN 4 / JOURN 5 Writing for Publication / Mass Communication	3.0
DM 10/10L Digital Media Literacy	4.0

(continued)

(continued - A.S. Degree Digital Media)

DM 11/11L Digital Media Design	3.0
DM 15 Pre-production	3.0
DM 22/22L Electronic Publishing	4.0
DM 30/30L Multimedia Authoring	6.0
Additional Courses (2.5 units from the following):	2.5
DM 20/20L Media Development	4.0
DM 70A Photoshop I	0.5
DM 71 Intro to Draw & Paint Software	0.5
DM 72 Intro to 3-D Animation	0.5
DM 73 Intro to Digitizing Sound	0.5
DM 74 Intro to Digitizing Video	0.5
DM 75 Intro to 2-D Animation	0.5
DM 76 Intro to Dreamweaver	0.5
DM 77 Streaming Media	0.5

[DM] Certificate of Achievement, Digital Media

	Units
Total Units	52.0
Program Requirements	52.0
Specific Courses	49.5
ART 10 Color & Design	3.0
ART 17 Drawing	3.0
ENGL 150/150L College Reading & Writing/Lab	3.5
SPCH 1 Public Speaking	3.0
BUS 63/63L Desktop Publishing Applications	4.0
CIS 1/1L or CIS 2/2L Computer Literacy / Beyond Computer Literacy	3.0
CIS 71 Community Projects	2.0
CIS 78 Introduction to Programming	0.5
DT 24 CAD Graphics	0.5
DT 80 Modeling & Animation	4.0
JOURN 4 / JOURN 5 Writing for Publication / Mass Communication	3.0
DM 10/10L Digital Media Literacy	4.0
DM 11/11L Digital Media Design	3.0
DM 15 Pre-production	3.0
DM 22/22L Electronic Publishing	4.0
DM 30/30L Multimedia Authoring	6.0
Additional Courses (2.5 units from the following):	2.5
DM 20/20L Media Development	4.0
DM 70A Photoshop I	0.5
DM 71 Intro to Draw & Paint Software	0.5
DM 72 Intro to 3-D Animation	0.5
DM 73 Intro to Digitizing Sound	0.5
DM 74 Intro to Digitizing Video	0.5
DM 75 Intro to 2-D Animation	0.5
DM 76 Intro to Dreamweaver	0.5
DM 77 Streaming Media	0.5

Photo: Paul DeMark

[DM] Certificate of Achievement, Animation

	Units
Total Units	16.5
Program Requirements	16.5
Specific Courses	16.5
DM 14/14L Portfolio Development	1.0
DM 23/23L Motion Graphics	4.0
DM 24/24L Cartoon Animation	4.0
DM 70A Introduction to Photoshop	0.5
DM 71 Introduction to Paint and Draw Software	0.5
DM 72 Introduction to 3D Animation	0.5
DM 73 Introduction to Digital Audio	0.5
DM 74 Introduction to Digital Video	0.5
DM 75A 2-D Animation I	0.5
DM 75B 2D Animation II	0.5
DT 80 Modeling and Animation	4.0

[DM] Certificate of Achievement, Internet Design

	Units
Total Units	25.5
Program Requirements	22.5
Specific Courses	22.5
DM 10/10L Digital Media Literacy	4.0
DM 11/11L Digital Media Design	3.0
DM 75A Intro to 2-D Animation	0.5
DM 76 Intro to Dreamweaver	0.5
BUS 10 Intro to Business	3.0
BUS 65/65L Intro to E-commerce/Lab	4.0
CIS 1/1L Computer Literacy/Lab	3.0
CIS 83 Guide to the Information Highway	0.5
CIS 85 Intro to Java Script	0.5
CIS 86 HTML Web Page Design	0.5
ART 10 Color & Design	3.0
Additional Courses (3.0 units from the following):	3.0
DM 20/20L Media Development/Lab	4.0
DM 70A Photoshop I	0.5
DM 71 Intro to Draw & Paint Software	0.5
DM 72 Intro to 3-D Animation	0.5
DM 73 Intro to Digitizing Sound	0.5
DM 74 Intro to Digitizing Video	0.5
DM 75B 2D Animation II	0.5
DM 77 Streaming Media	0.5

DRAFTING TECHNOLOGY [DT]

Programs in this field provide educational opportunities for students seeking careers related to architectural and mechanical drafting, civil design, or computer-aided design and drafting. Specific programs include:

- Associate of Science Degree, Architectural Drafting
- Associate of Science Degree, Mechanical Drafting
- Associate of Science Degree, Civil Drafting
- Certificate of Achievement, Architectural Drafting
- Certificate of Achievement, Mechanical Drafting
- Certificate of Achievement, Civil Design
- Certificate of Completion, Computer Aided Design and Drafting

[DT] Associate of Science Degree, Architectural Drafting

	Units
Total Units	60.0
General Education Requirements	18.5
Core Courses (Areas B, D2)	6.0
Specific Courses	12.5
Art 17 Drawing (Area C)	3.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 62 Technical Mathematics (Area D3)	3.0
PHYS 10 Introduction to Physics (Area A)	3.0
Program Requirements	40.0
CT 50 Construction Estimating	4.0
CT 70 Building Codes & Standards	2.0
CT 72 Electrical Codes & Standards	2.0
CT 80 Carpentry Theory I	3.0
CT 81 Carpentry Theory II	3.0
DT 25 CADD Fundamentals	3.0
DT 44 Advanced CAD Applications	3.0
DT 50 3-D CAD Applications	3.0
DT 71 Architectural Drafting Techniques	3.0
DT 73 Residential Design	3.0
DT 80 Modeling & Animation	4.0
ENGR 23 Engineering Graphics	3.0
IT 46 Computers in Industrial Management	3.0
IT 152 Technical Computer Applications Lab	1.0
Electives	1.5

[DT] Certificate of Achievement, Architectural Drafting

	Units
Total Units	40.0
Program Requirements	40.0
CT 50 Construction Estimating	4.0
CT 70 Building Codes & Standards	2.0
CT 72 Electrical Codes & Standards	2.0
CT 80 Carpentry Theory I	3.0
CT 81 Carpentry Theory II	3.0
DT 25 CADD Fundamentals	4.0
DT 44 Advanced CAD Applications	3.0
DT 50 3-D CAD Applications	3.0
DT 71 Architectural Drafting Techniques	3.0
DT 73 Residential Design	3.0
DT 80 Modeling & Animation	4.0
ENGR 23 Engineering Graphics	3.0
IT 62 Technical Mathematics	3.0

[DT] Associate of Science Degree, Civil Design

	Units
Total Units	60.0
General Education Requirements	18.5
Core Courses (Areas B, C, D2)	9.0
Specific Courses	9.5
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 62 Technical Mathematics (Area D3)	3.0
PHYS 10 Introduction to Physics (Area A)	3.0
Program Requirements	39.0
DT 25 CADD Fundamentals	3.0
DT 31 Civil Drafting Fundamentals	3.0
DT 32 Advanced Civil Drafting Applications	3.0
DT 44 Advanced CAD Applications	3.0
DT 50 3-D CAD Applications	3.0
DT 80 Modeling & Animation	4.0
ENGR 23 Engineering Graphics	3.0
NR 52 Introduction to Surveying	4.0
NR 57 Route Surveying	2.0
NR 65 Introduction to GIS	3.0
NR 66 Advanced Arcview & GPS	4.0
IT 46 Computers in Industrial Management	3.0
IT 152 Technical Computer Applications Lab	1.0
Electives	2.5

Photo: Paul DeMark

[DT] Certificate of Achievement, Civil Design

	Units
Total Units	39.0
Program Requirements	39.0
DT 25 CADD Fundamentals	4.0
DT 31 Civil Drafting Fundamentals	3.0
DT 32 Advanced Civil Drafting Applications	3.0
DT 44 Advanced CAD Applications	3.0
DT 50 3-D CAD Applications	3.0
DT 80 Modeling & Animation	4.0
ENGR 23 Engineering Graphics	3.0
NR 52 Introduction to Surveying	4.0
NR 57 Route Surveying	2.0
NR 65 Introduction to GIS	3.0
NR 66 Advanced Arcview & GPS	4.0
IT 62 Technical Mathematics	3.0

[DT] Certificate of Completion, Computer Aided Design and Drafting

	Units
Total Units	17.0
Program Requirements	17.0
DT 25 CADD Fundamentals	4.0
DT 44 Advanced CAD Applications	3.0
DT 50 3-D CAD Applications	3.0
DT 80 Modeling & Animation	4.0
ENGR 23 Engineering Graphics	3.0

[DT] Associate of Science Degree, Mechanical Drafting

	Units
Total Units	60.0
General Education Requirements	18.5
Core Courses (Areas B, C, D2)	9.0
Specific Courses	9.5
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 62 Technical Mathematics (Area D3)	3.0
PHYS 10 Introduction to Physics (Area A)	3.0
Program Requirements	39.0
DT 25 CADD Fundamentals	3.0
DT 44 Advanced CAD Applications	3.0
DT 50 3-D CAD Applications	3.0
DT 62 Industrial Drafting	3.0
DT 63 Mechanical Design Drafting	3.0
DT 80 Modeling & Animation	4.0
ENGR 23 Engineering Graphics	3.0
IT 46 Computers in Industrial Management	3.0
IT 60A Manufacturing Blueprint Reading	3.0
IT 60B Machine Parts Blueprint Reading	3.0
IT 152 Technical Computer Applications Lab	1.0
MT 59A MasterCam 2-D Programming	4.0
MT 62A Machine Shop Procedures	3.0
Electives	2.5

[DT] Certificate of Achievement, Mechanical Drafting

	Units
Total Units	32.0
Program Requirements	32.0
DT 25 CADD Fundamentals	4.0
DT 44 Advanced CAD Applications	3.0
DT 50 3-D CAD Applications	3.0
DT 62 Industrial Drafting	3.0
DT 63 Mechanical Design Drafting	3.0
DT 80 Modeling & Animation	4.0
ENGR 23 Engineering Graphics	3.0
IT 60A Manufacturing Blueprint Reading	3.0
IT 60B Machine Parts Blueprint Reading	3.0
IT 62 Technical Mathematics	3.0

EARLY CHILDHOOD EDUCATION [ECE]

Programs in this field prepare students for work with young children in variety of settings including family child care and child care settings licensed by the State of California. The scope of programs ranges from care for infants and toddlers to preschool and school-age children. Specific programs include:

- Associate of Science Degree, Early Childhood Education – Infants/Toddler Care and Intervention
- Associate of Science Degree, Early Childhood Education – Preschool
- Associate of Science Degree, Early Childhood Education – School Age
- Associate of Science Degree, Early Childhood Education – Special Needs
- Certificate of Completion, Early Childhood Education

[ECE] Associate of Science Degree, Early Childhood Education-Infant/Toddler Care & Intervention

	Units
Total Units	60.0
General Education Requirements	18.0
Core Courses (Areas A, B, C, D1, D2, D3)	18.0
Program Requirements	32.0
Specific Courses	29.0
ECE 1 Introduction to Early Childhood Education	3.0
ECE 2Y Child Growth & Development (0-5)	3.0
ECE 5 The Child in the Family & Community	3.0
ECE 6CH Child Health, Safety, & Nutrition	2.0
ECE 6FA Pediatric First Aid & CPR	1.0
ECE 7/7L Foundations of Play-based Curriculum	4.0
ECE 10LC Seminar for Field Placement in ECE	2.0

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(continued - A.S. Degree ECE, Infant-Toddler)

ECE 10LB1/2 Field Placement in Early Intervention or Infant-Toddler Settings	2.0
ECE 18 Equity & Diversity in Children's Programs	3.0
ECE 11 Infant & Toddler Care & Education	3.0
ECE 21 Early Intervention Principles and Practices	3.0
Additional Courses (3.0 units from the following):	3.0
ECE 12 Administration of Programs for Young Children I	3.0
ECE 13 Administration of Programs for Young Children II	3.0
Electives	10.0

[ECE] Associate of Science Degree, Early Childhood Education-Preschool

	Units
Total Units	60.0
General Education Requirements	18.0
Core Courses (Areas A, B, C, D1, D2, D3)	18.0
Program Requirements	33.0
Specific Courses	27.0
ECE 1 Introduction to Early Childhood Education	3.0
ECE 2Y Child Growth & Development (0-5)	3.0
ECE 5 The Child in the Family & Community	3.0
ECE 6CH Child Health, Safety, & Nutrition	2.0
ECE 6FA Pediatric First Aid & CPR	1.0
ECE 7/7L Foundations of Play-based Curriculum	4.0
ECE 9/9L Implementation of Play-based Curriculum	4.0
ECE 10LC Seminar for Field Placement in ECE	2.0
ECE 10LB3 Field Placement in Play-Based Preschool Settings	2.0
ECE 18 Equity & Diversity in Children's Programs	3.0
Additional Courses (3.0 units from the following):	3.0
ECE 11 Infant & Toddler Care & Education	3.0
ECE 14 Children with Special Needs in ECE	3.0
ECE 15 School-age Children in Child Care	3.0
ECE 21 Early Intervention Principles and Practices	3.0
Additional Courses (3.0 units from the following):	3.0
ECE 12 Administration of Programs for Young Children I	3.0
ECE 13 Administration of Programs for Young Children II	3.0
Electives	9.0

[ECE] Associate of Science Degree, Early Childhood Education-School Age

	Units
Total Units	60.0
General Education Requirements	18.0
Core Courses (Areas A, B, C, D1, D2, D3)	18.0
Program Requirements	32.0
Specific Courses	29.0
ECE 1 Introduction to Early Childhood Education	3.0
ECE 2Y Child Growth & Development (0-5)	3.0
ECE 2M Child Growth & Development (5-13)	3.0
ECE 5 The Child in the Family & Community	3.0
ECE 6CH Child Health, Safety, & Nutrition	2.0
ECE 6FA Pediatric First Aid & CPR	1.0
ECE 7/7L Foundations of Play-based Curriculum	4.0
ECE 10LC Seminar for Field Placement in ECE	2.0
ECE 10LB 4 Field Placement in School-Age Child care Settings	2.0
ECE 18 Equity & Diversity in Children's Programs	3.0
ECE 15 School-age Children in Child Care	3.0
Additional Courses (3.0 units from the following):	3.0
ECE 12 Administration of Programs for Young Children I	3.0
ECE 13 Administration of Programs for Young Children II	3.0
Electives	10.0

[ECE] Associate of Science Degree, Early Childhood Education-Special Needs

	Units
Total Units	60.0
General Education Requirements	18.0
Core Courses (Areas A, B, C, D1, D2, D3)	18.0
Program Requirements	32.0
Specific Courses	29.0
ECE 1 Introduction to Early Childhood Education	3.0
ECE 2Y Child Growth & Development (0-5)	3.0
ECE 5 The Child in the Family & Community	3.0
ECE 6CH Child Health, Safety, & Nutrition	2.0
ECE 6FA Pediatric First Aid & CPR	1.0
ECE 7/7L Foundations of Play-based Curriculum	4.0
ECE 10LC Seminar for Field Placement in ECE	2.0
ECE 10LB1 Field Placement in Early Intervention Settings	2.0
ECE 18 Equity & Diversity in Children's Programs	3.0
ECE 14 Children with Special Needs in ECE	3.0
ECE 21 Early Intervention Principles and Practices	3.0

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(continued - A.S. Degree ECE Special Needs)

Additional Courses (3.0 units from the following):	3.0
ECE 12 Administration of Programs for Young Children I	3.0
ECE 13 Administration of Programs for Young Children II	3.0
Electives	10.0

[ECE] Certificate of Completion, Early Childhood Education

	Units
Total Units	13.0
Program Requirements	13.0
ECE 1 Intro to Early Childhood Education	3.0
ECE 2Y Child Growth & Development (0-5)	3.0
ECE 5 The Child in the Family & Community	3.0
ECE 7 Foundations of Play-based Curriculum	4.0

FORESTRY AND NATURAL RESOURCES TECHNOLOGY [FOR]

Programs in this field provide basic and advanced educational opportunities for students seeking careers related to forestry and natural resources. Specific programs include:

- Associate of Science Degree, Forestry and Natural Resources Technology
- Certificate of Achievement, Basic Forestry and Natural Resources Technology
- Certificate of Achievement, Advanced Forestry and Natural Resources Technology
- Certificate of Achievement, Geographic Information Systems

[FOR] Associate of Science Degree, Forestry and Natural Resources Technology

	Units
Total Units	60.0
General Education Requirements	18.5
Core Courses (Area B)	3.0
Specific Courses	15.5
ENVSC 11 Environmental Ethics (Area C)	3.0
IT 62 or MATH 120 Technical Math or Intermediate Algebra (Area D3)	3.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
AG 17 Introduction to Soils (Area A)	3.0
SPCH 1 Public Speaking (Area D2)	3.0

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(continued - A.S. Degree Forestry & Natural Resource Technology)

Program Requirements	41.5
FOR 1 Introduction to Forestry/ Natural Resources	3.0
FOR 51 Dendrology	3.0
CIS 1/1L Computer Literacy	3.0
NR 54 Natural Resource Measurements	3.0
NR 58 Intro to Photogrammetry & Remote Sensing	2.0
FOR 60 Forest Protection & Ecology	3.0
FOR 77 Wildland Fire Suppression	3.0
FOR 50 Silviculture	3.0
NR 52 Introduction to Surveying	4.0
FOR 59 Forest Mensuration (half-semester)	1.5
NR 65 Introduction to GIS	3.0
NR 57 Route Surveying	2.0
NR 80 Watershed Management	3.0
NR 87 Wildlife Ecology & Habitat Inventory	2.0
NR 91 Public Relations & Personnel Management In NR	2.0
FOR 96 FOR/NR Skill Seminar	1.0

[FOR] Certificate of Achievement, Basic Forestry and Natural Resources Technology

	Units
Total Units	29.0
Program Requirements	29.0
FOR 1 Introduction to Forestry/ Natural Resources	3.0
FOR 51 Dendrology	3.0
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra	3.0
NR 54 Natural Resource Measurements	3.0
NR 58 Introduction to Photogrammetry & Remote Sensing	2.0
FOR 60 Forest Protection & Ecology	3.0
FOR 77 Wildland Fire Suppression	3.0
FOR 50 Silviculture	3.0
NR 80 Watershed Management	3.0
NR 91 Public Relations & Personnel Management in NR	2.0
FOR 96 FOR/NR Skill Seminar	1.0

[FOR] Certificate of Achievement, Advanced Forestry and Natural Resources Technology

	Units
Total Units	48.0
Program Requirements	48.0
FOR 1 Introduction to Forestry/ Natural Resources	3.0
FOR 51 Dendrology	3.0
IT 161 or MATH 106 Technical Mathematics or Elementary Algebra	3.0

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(continued - Certificate of Achievement, Advanced Forestry & Natural Resources Technology)

NR 54 Natural Resource Measurements	3.0
NR 58 Introduction to Photogrammetry & Remote Sensing	2.0
FOR 60 Forest Protection & Ecology	3.0
FOR 77 Wildland Fire Suppression	3.0
ENGL 150/150L College Reading & Writing/Lab	3.5
FOR 50 Silviculture	3.0
NR 52 Introduction to Surveying	4.0
FOR 59 Forest Mensuration	1.5
NR 65 Introduction to GIS	3.0
AG 17 Introduction to Soils	3.0
NR 57 Route Surveying	2.0
NR 80 Watershed Management	3.0
NR 87 Wildlife Ecology & Habitat Inventory	2.0
NR 91 Public Relations & Personnel Management in NR	2.0
FOR 96 FOR/NR Skill Seminar	1.0

[FOR] Certificate of Achievement, Geographic Information Systems

	Units
Total Units	29.0
Program Requirements	29.0
NR 52 Intro to Surveying	4.0
NR 65 Intro to GIS	3.0
CIS 2/2L Beyond Computer Literacy	4.0
CIS 50/50L Database Applications	4.0
NR 66 Advanced ArcView & GPS	4.0
NR 68 Intro to ArcGIS	4.0
CIS 18/18L Visual Basic Programming	4.0
NR 58 Intro to Photogrammetry & Remote Sensing	2.0

GRAPHIC COMMUNICATIONS [GC]

Programs in this field provide educational opportunities for students seeking careers related to graphic design, printing, and publication. Specific programs include:

- Associate of Science Degree, Graphic Communications
- Certificate of Achievement Graphic Communications

(continued)

(continued - A.S. Degree, Graphic Communication)

[GC] Associate of Science Degree, Graphic Communications

	Units
Total Units	60.0
General Education Requirements	18.0
Core Courses (Areas A, B, D1, D2, D3)	15.0
Specific Courses	3.0
ART 10 Color & Design (Area C)	3.0
Program Requirements	39.5
ART 16 Lettering & Layout	3.0
ART 17 Drawing	3.0
ART 20 Illustration	3.0
ART 35 Photography	3.0
ART 43A Basic Digital Imaging	3.0
ART 44 Printmaking	3.0
BUS 63/63L Desktop Publishing Applications	4.0
BUS 64 Advertising	3.0
CE 42 Occupational Cooperative Education	1.0
ENGL 70 Student Magazine Production	2.0
GC 10 Introduction to Graphic Communications	2.0
GC 11 Design for Printing	1.5
GC 12 Desktop Publishing Applications	3.0
GC 20 Graphics Business Management	1.0
GC 22 Commercial Design	3.0
GUID 41 World of Work	1.0
Electives	2.5

[GC] Certificate of Achievement, Graphic Communications

	Units
Total Units	42.5
Program Requirements	42.5
ART 10 Color & Design	3.0
ART 16 Lettering & Layout	3.0
ART 17 Drawing	3.0
ART 20 Illustration	3.0
ART 35 Photography	3.0
ART 43A Basic Digital Imaging	3.0
ART 44 Printmaking	3.0
BUS 63/63L Desktop Publishing Applications	4.0
BUS 64 Advertising	3.0
CE 42 Occupational Cooperative Education	1.0
ENGL 70 Student Magazine Production	2.0
GC 10 Introduction to Graphic Communications	2.0
GC 11 Design for Printing	1.5
GC 12 Desktop Publishing Applications	3.0
GC 20 Graphics Business Management	1.0
GC 22 Commercial Design	3.0
GUID 41 World of Work	1.0

Photo: Computer & Consulting Services

LEGAL ASSISTANCY [LEGL]

Programs in this field provide general and specific educational opportunities for students seeking careers related to the legal profession or a more advanced study of law. Specific programs include:

- Associate of Science Degree, Legal Assistancy/ Paralegal Studies
- Certificate of Achievement, Child Support Specialist
- Certificate of Achievement, Paralegal Studies

[LEGL] ASSOCIATE OF SCIENCE DEGREE, LEGAL ASSISTANCY/PARALEGAL STUDIES

	Units
Total Units	60.0
General Education Requirements	18.0
Core Courses (Areas A, C, D1, D2, D3)	15.0
Specific Courses	3.0
LEGL 41 Intro to Law & Legal System (Area B)	3.0
Program Requirements	37.0
Specific Courses	35.0
AJ 4 Criminal Law	4.0
CIS 1/1L Computer Literacy/Lab	3.0
LEGL 42A Legal Research & Writing I	3.0
LEGL 42B Legal Research & Writing II	3.0
LEGL 143 Contracts & Restitution	3.0
LEGL 144 Enterprise Law	3.0
LEGL 145A Civil Procedure I	3.0
LEGL 145B Civil Procedure II	3.0
LEGL 146 Family Law	3.0
LEGL 147 Wills & Trusts	3.0
LEGL 148 Tort Law	3.0
LEGL 155 Law Practicum	1.0
Additional Courses (2.0 units from the following:)	2.0
LEGL 153 Mediation	2.0
LEGL 151 Bankruptcy Law and Procedures	3.0
Electives	5.0

[LEGL] CERTIFICATE OF ACHIEVEMENT, PARALEGAL STUDIES

	Units
Total Units	40.0
Program Requirements	40.0
AJ 4 Criminal Law	4.0
CIS 1/1L Computer Literacy and Lab	3.0
LEGL 41 Intro to Law & Legal System	3.0
LEGL 42A Legal Research & Writing I	3.0
LEGL 42B Legal Research & Writing II	3.0
LEGL 143 Contracts & Restitution	3.0
LEGL 144 Enterprise Law	3.0
LEGL 145A Civil Procedure I	3.0
LEGL 145B Civil Procedure II	3.0
LEGL 146 Family Law	3.0
LEGL 147 Wills & Trusts	3.0
LEGL 148 Tort Law	3.0
LEGL 153 or 151 Mediation or Bankruptcy	2.0
LEGL 155 Law Practicum	1.0

[LEGL] CERTIFICATE OF ACHIEVEMENT, CHILD SUPPORT SPECIALIST

	Units
Total Units	28.0
Program Requirements	28.0
BUS 94 Business Math	3.0
BUS 119T Legal Terminology	2.0
BUS 152 or ENGL 150/150L Business English or College Reading & Writing/Lab	3.0
BUS 156 Legal Office Procedures	3.0
CIS 1/1L Computer Literacy/Lab	3.0
LEGL 41 Intro to Law & Legal System	3.0
LEGL 42A Legal Research & Writing I	3.0
LEGL 146 Family Law	3.0
LEGL 155 Law Practicum	1.0
LEGL 157 Child Support Specialist	4.0

LICENSED VOCATIONAL NURSING [LVN]

Programs in this field provide educational opportunities for students seeking careers as Licensed Vocational Nurses (LVN). Upon completion of the appropriate program, students are eligible to take the National Council Licensing Exam for Practical Nursing (NCLEX-PN). Specific program options include:

- Associate of Science Degree, Licensed Vocational Nursing
- Certificate of Achievement, Licensed Vocational Nursing

(continued)

(continued - Licensed Vocational Nursing)

Note: High school completion is required for entry into the LVN program. For Licensed Vocational Nursing (LVN) program progression and completion, a grade of "C" or better is required in all LVN courses. For information on program admission and prerequisites, obtain the Health Occupations Program Information booklet through the Health Occupations Office or the department webpage at: http://www.redwoods.edu/departments/HO/programs.htm

[NURS] Associate of Science Degree, Licensed Vocational Nursing

	Units
Total Units	64.0
Prerequisite - Eligibility for enrollment in ENGL 150 and MATH 106; and California CNA Certification or HO 110, Basic Patient Care	
General Education Requirements	18.0
Core Courses (Areas B, C, D1, D2, D3)	15.0
Specific Courses	3.0
LVN 114 Anatomy, Physiology, & Microbiology for Vocational Nursing (Area A)	3.0
Program Requirements	46.0
HO 15 Nutrition	3.0
LVN 110A Pharmacology in Vocational Nursing I	2.0
LVN 110B Pharmacology in Vocational Nursing II	2.0
LVN 111 Pharmacology Skills-Vocational Nursing	0.5
LVN 118 Psychology for Vocational Nursing	2.0
LVN 121 Nursing of Adults & Children I	7.5
LVN 122 Nursing of Adults & Children II	13.0
LVN 123 Nursing of Adults & Children III	16.0

[NURS] Certificate of Achievement, Licensed Vocational Nursing

	Units
Total Units	49.0
Prerequisite - Eligibility for enrollment in ENGL 150 and MATH 106; and California CNA Certification or HO 110, Basic Patient Care	
Program Requirements	49.0
LVN 114 Anatomy, Physiology, & Microbiology for Vocational Nursing	3.0
HO 15 Nutrition	3.0
LVN 110A Pharmacology in Vocational Nursing I	2.0
LVN 110B Pharmacology in Vocational Nursing II	2.0
LVN 111 Pharmacology Skills-Vocational Nursing	0.5
LVN 118 Psychology for Vocational Nursing	2.0
LVN 121 Nursing of Adults & Children I	7.5
LVN 122 Nursing of Adults & Children II	13.0
LVN 123 Nursing of Adults & Children III	16.0

MANUFACTURING TECHNOLOGY [MT]

Programs in this field provide general and specific educational opportunities for students seeking careers in drafting and design for manufacturing, machining operations, computer-controlled manufacturing, process control, production, and supervision. Specific programs include:

- Associate of Science Degree, Manufacturing Technology
- Associate of Science Degree, Computer Numerical Control
- Associate of Science Degree, CADD/CAM Manufacturing
- Associate of Science Degree, Numerical Control Maintenance
- Certificate of Achievement, Manufacturing Technology
- Certificate of Achievement, Computer Numerical Control
- Certificate of Achievement, CADD/CAM Manufacturing
- Certificate of Achievement, Numerical Control Maintenance
- Certificate of Completion, Manufacturing Technology
- Certification of Completion, Computer Numerical Control

[MT] Associate of Science Degree, General Manufacturing Technology

	Units
Total Units	66.5
General Education Requirements	18.5
Core Courses (Areas B, C, D2)	9.0
Specific Courses	9.5
CET 10 Survey of Electronics (Area A)	3.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 62 Technical Mathematics (Area D3)	3.0
Program Requirements	48.0
CET 10L Survey of Electronics Lab	1.0
IT 60A Manufacturing Blueprint Reading	3.0
IT 60B Machine Parts Blueprint Reading	3.0
MT 52 Ferrous Metallurgy	3.0
MT 54A Numerical Control Machining	4.0
MT 54B Computer Numerical Control Machining	4.0
MT 55 Electrical Discharge Machining	2.0
MT 60A Machine Tool Technology	6.0
MT 60B Machine Tool Technology	6.0
MT 61A Machine Tool Technology	6.0
MT 61B Machine Tool Technology	6.0
WT 53 Welding Procedures	2.0
WT 54 Welding Procedures	2.0

[MT] Certificate of Achievement, General Manufacturing Technology

	Units
Total Units	48.0
Program Requirements	48.0
IT 60A Manufacturing Blueprint Reading	3.0
IT 60B Machine Parts Blueprint Reading	3.0
IT 62 Technical Mathematics	3.0
MT 52 Ferrous Metallurgy	3.0
MT 54A Numerical Control Machining	4.0
MT 54B Computer Numerical Control Machining	4.0
MT 55 Electrical Discharge Machining	2.0
MT 60A Machine Tool Technology	6.0
MT 60B Machine Tool Technology	6.0
MT 61A Machine Tool Technology	6.0
MT 61B Machine Tool Technology	6.0
WT 54 Welding Procedures	2.0

[MT] Certificate of Completion, General Manufacturing Technology

	Units
Total Units	28.0
Program Requirements	28.0
MT 54A Numerical Control Machining	4.0
MT 60A Machine Tool Technology	6.0
MT 60B Machine Tool Technology	6.0
MT 61A Machine Tool Technology	6.0
MT 61B Machine Tool Technology	6.0

[MT] Associate of Science Degree, Computer Numerical Control

	Units
Total Units	70.5
General Education Requirements	18.5
Core Courses (Areas B, C, D2)	9.0
Specific Courses	9.5
CET 10 Survey of Electronics (Area A)	3.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 62 Technical Mathematics (Area D3)	3.0
Program Requirements	52.0
CET 10L Survey of Electronics Lab	1.0
IT 60A Manufacturing Blueprint Reading	3.0
IT 60B Machine Parts Blueprint Reading	3.0
MT 52 Ferrous Metallurgy	3.0
MT 54A Numerical Control Machining	4.0
MT 54B Computer Numerical Control Machining	4.0
MT 55 Electrical Discharge Machining	2.0
MT 59A MasterCAM 2-D Programming	4.0
MT 59B MasterCAM 3D Programming	4.0
MT 60A Machine Tool Technology	6.0
MT 60B Machine Tool Technology	6.0
MT 61A Machine Tool Technology	6.0
MT 61B Machine Tool Technology	6.0

[MT] Certificate of Achievement, Computer Numerical Control

	Units
Total Units	54.0
Program Requirements	54.0
IT 60A Manufacturing Blueprint Reading	3.0
IT 60B Machine Parts Blueprint Reading	3.0
IT 62 Technical Mathematics	3.0
MT 52 Ferrous Metallurgy	3.0
MT 54A Numerical Control Machining	4.0
MT 54B Computer Numerical Control Machining	4.0
MT 55 Electrical Discharge Machining	2.0
MT 59A MasterCAM 2-D Programming	4.0
MT 59B MasterCAM 3D Programming	4.0
MT 60A Machine Tool Technology	6.0
MT 60B Machine Tool Technology	6.0
MT 61A Machine Tool Technology	6.0
MT 61B Machine Tool Technology	6.0

[MT] Certificate of Completion, Computer Numerical Control

	Units
Total Units	40.0
Program Requirements	40.0
MT 54A Numerical Control Machining	4.0
MT 54B Computer Numerical Control Machining	4.0
MT 59A MasterCAM 2-D Programming	4.0
MT 59B MasterCAM 3D Programming	4.0
MT 60A Machine Tool Technology	6.0
MT 60B Machine Tool Technology	6.0
MT 61A Machine Tool Technology	6.0
MT 61B Machine Tool Technology	6.0

[MT] Associate of Science Degree, CADD/CAM Manufacturing

	Units
Total Units	64.5
General Education Requirements	18.5
Core Courses (Areas B, C, D2)	9.0
Specific Courses	9.5
CET 10 Survey of Electronics (Area A)	3.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 62 Technical Mathematics (Area D3)	3.0
Program Requirements	46.0
Specific Courses	40.0
DT 25 CADD Fundamentals	4.0
DT 50 CAD Applications	3.0
DT 62 Industrial Drafting	3.0
DT 63 Mechanical Design Drafting	3.0
IT 60A Manufacturing Blueprint Reading	3.0
IT 60B Machine Parts Blueprint Reading	3.0
MT 52 Ferrous Metallurgy	3.0

(continued)

(continued - A.S. Degree CADD/CAM Manufacturing)

MT 54A Numerical Control Machining	4.0
MT 54B Computer Numerical Control	4.0
MT 55 Electrical Discharge Machining	2.0
MT 59A MasterCAM 2-D Programming	4.0
MT 59B MasterCAM 3-D Programming	4.0
Additional Courses (6.0 units from the following):	6.0
MT 60A Machine Tool Technology	6.0
MT 60B Machine Tool Technology	6.0
MT 61A Machine Tool Technology	6.0
MT 61B Machine Tool Technology	6.0

[MT] Certificate of Achievement, CADD/CAM Manufacturing

	Units
Total Units	46.0
Program Requirements	46.0
CET 10 Survey of Electronics	3.0
DT 25 CADD Fundamentals	4.0
DT 50 CAD Applications	3.0
DT 62 Industrial Drafting	3.0
DT 63 Mechanical Design Drafting	3.0
IT 60A Manufacturing Blueprint Reading	3.0
IT 60B Machine Parts Blueprint Reading	3.0
IT 62 Technical Mathematics	3.0
MT 52 Ferrous Metallurgy	3.0
MT 54A Numerical Control Machining	4.0
MT 54B Computer Numerical Control	4.0
MT 55 Electrical Discharge Machining	2.0
MT 59A MasterCAM 2-D Programming	4.0
MT 59B MasterCAM 3-D Programming	4.0

[MT] Associate of Science Degree, Numerical Control Maintenance

	Units
Total Units	64.5
General Education Requirements	18.5
Core Courses (Areas B, C, D2)	9.0
Specific Courses	9.5
CET 10 Survey of Electronics (Area A)	3.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
IT 62 Technical Mathematics (Area D3)	3.0
Program Requirements	46.0
Specific Courses	34.0
CET 10L Survey of Electronics Lab	1.0
CET 43/43L Digital & Microprocessor Fundamentals/Lab	4.0
CET 44/44L Microcomputer Fundamentals/Lab	4.0
CET 46/46L Microcomputer Interfacing/Lab	2.0
CET 149 Electronics Project Construction	2.0
CET 170 Industrial Electronics	3.0
DHET 167 Hydraulics & Pneumatics	3.0
IT 60A Blueprint Reading	3.0

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(continued - A.S. Degree Numerical Control Maintenance)

MT 54A Numerical Control Machining	4.0
MT 54B Computer Numerical Control Machining	4.0
MT 54L Numerical Control Lab	4.0
Additional Courses (12.0 units from the following):	12.0
MT 60A Machine Tool Technology	6.0
MT 60B Machine Tool Technology	6.0
MT 61A Machine Tool Technology	6.0
MT 61B Machine Tool Technology	6.0

[MT] Certificate of Achievement, Numerical Control Maintenance

	Units
Total Units	40.0
Program Requirements	40.0
CET 10 Survey of Electronics	3.0
CET 10L Survey of Electronics Lab	1.0
CET 43/43L Digital & Microprocessor Fundamentals/Lab	4.0
CET 44/44L Microcomputer Fundamentals/Lab	4.0
CET 46/46L Microcomputer Interfacing/Lab	2.0
CET 149 Electronics Project Construction	2.0
CET 170 Industrial Electronics	3.0
DHET 167 Hydraulics & Pneumatics	3.0
IT 60A Blueprint Reading	3.0
IT 62 Technical Mathematics	3.0
MT 54A Numerical Control Machining	4.0
MT 54B Computer Numerical Control Machining	4.0
MT 54L Numerical Control Lab	4.0

MARINE SCIENCE TECHNOLOGY [MS]

Programs in this field provide educational opportunities for students seeking careers related to marine science and oceanography. Additional information is available at: http://mendocino.redwoods.cc.ca.us/winn/marinescience.
Specific programs include:

- Associate of Science Degree, Marine Science Technology
- Certificate of Achievement, Marine Science Technology

(continued)

Photo: CR Mendocino Coast - Marine Science Technology

Photo: CR Mendocino Coast - Marine Science Technology

[MS] Associate of Science Degree, Marine Science Technology

	Units
Total Units	61.0
General Education Requirements	18.0
Core Courses (Areas B, C, D1, D2, D3)	15.0
Specific Courses	3.0
BIOL 1 General Biology (Area A)	3.0
Program Requirements	33.0
Specific Courses	21.0
BIOL 15 Marine Biology	3.0
BIOL 24 Intro to Marine & Anadromous Fishes	3.0
BIOL 25 Marine & Coastal Field Biology	3.0
CIS 1/1L Computer Literacy & Lab	3.0
OCEAN 10 Intro to Oceanography	3.0
OCEAN 11 Laboratory on Oceanography	1.0
OCEAN 12 Environmental Oceanography	3.0
BIOL 40 or OCEAN 40 Independent Study	2.0
Additional Courses (12.0 units from the following):	12.0
BIOL 4 General Zoology	4.0
BIOL 5 Introduction to Botany	4.0
BIOL 16 Birds of the North Coast	2.0
BIOL 18 Natural History of North Coast Animals	3.0
BIOL 20 Natural History	3.0
BIOL 26 Marine Plankton	2.0
BIOL 35 Field Studies in Biology	2.0
BIOL 120E Intertidal Ecology	0.5
BIOL 120K Marine Mammals of the North Coast	0.5
BIOL 120M Intro to ID of North Coast Birds	0.5
BIOL 120P Marine Algae	0.5
CHEM 1A General Chemistry	5.0
CHEM 1B General Chemistry	5.0
CHEM 2 Intro to General Chemistry	5.0
CIS 50/50L Database Applications & Lab	4.0
ENVSC 10 Intro to Environmental Science	3.0
ENVSC 10H Intro to Environmental Science, Honors	3.0
GEOG 1 Physical Geography	3.0
GEOL 1 General Geology, Physical	4.0
GEOL 130C Coastal Geology	0.5
MATH 15 Elementary Statistics	3.0
MATH 30 College Algebra	4.0
MATH 50A Calculus I	4.0
METEO 1 Intro to Meteorology	3.0
PHYSC 10 Intro to Physical Science	3.0
PHYS 2A General Physics	4.0
PHYS 2B General Physics	4.0
Electives	10.0

[MS] Certificate of Achievement, Marine Science Technology

	Units
Total Units	30.0
Program Requirements	24.0
Specific Courses	24.0
BIOL 1 General Biology	3.0
BIOL 15 Marine Biology	3.0
BIOL 24 Intro to Marine & Anadromous Fishes	3.0
BIOL 25 Marine & Coastal Field Biology	3.0
CIS 1/1L Computer Literacy & Lab	3.0
OCEAN 10 Intro to Oceanography	3.0
OCEAN 11 Laboratory on Oceanography	1.0
OCEAN 12 Environmental Oceanography	3.0
BIOL 40 or OCEAN 40 Independent Study	2.0
Additional Courses (6.0 units from the following):	6.0
BIOL 4 General Zoology	4.0
BIOL 5 Introduction to Botany	4.0
BIOL 16 Birds of the North Coast	2.0
BIOL 18 Natural History of North Coast Animals	3.0
BIOL 20 Natural History	3.0
BIOL 26 Marine Plankton	2.0
BIOL 35 Field Studies in Biology	2.0
BIOL 120E Intertidal Ecology	0.5
BIOL 120K Marine Mammals of the North Coast	0.5
BIOL 120M Intro to ID of North Coast Birds	0.5
BIOL 120P Marine Algae	0.5
CHEM 1A General Chemistry	5.0
CHEM 1B General Chemistry	5.0
CHEM 2 Intro to General Chemistry	5.0
CIS 50/50L Database Applications & Lab	4.0
ENVSC 10 Intro to Environmental Science	3.0
ENVSC 10H Intro to Environmental Science, Honors	3.0
GEOG 1 Physical Geography	3.0
GEOL 1 General Geology, Physical	4.0
GEOL 130C Coastal Geology	0.5
MATH 15 Elementary Statistics	3.0
MATH 30 College Algebra	4.0
MATH 50A Calculus I	4.0
METEO 1 Intro to Meteorology	3.0
PHYSC 10 Intro to Physical Science	3.0
PHYS 2A General Physics	4.0
PHYS 2B General Physics	4.0

MEDICAL ASSISTING [MA]

Programs in this field provide educational opportunities for students seeking careers as medical assistants providing office, administrative, and clinical support services to medical practitioners. Specific programs include:

- Associate of Science Degree, Medical Assisting
- Certificate of Achievement, Medical Assisting

(continued)

Note: For Medical Assisting Program progression and completion, a grade of "C" or better is required in all MA courses. For information on program requirements, obtain the Health Occupations Program Information booklet through the Health Occupations Office or the department web page at: www.redwoods.edu/departments/HO/programs.htm

[MA] Associate of Science Degree, Medical Assisting

	Units
Total Units	60.0

Prerequisite: Eligibility for enrollment in ENGL 150 and MATH 106

General Education Requirements	18.0
Core Courses (Areas A, C, D3)	9.0
Specific Courses	9.0
BUS 152 Business English (Area D1)	3.0
PSYCH 33 or PSYCH 1 Personal Growth & Adjustment or General Psychology (Area B)	3.0
SPCH 7 Interpersonal Communication (Area D2)	3.0
Program Requirements	28.0
Specific Courses	22.0
CIS 1/1L Computer Literacy/Lab	3.0
MA 152 Medical Terminology	3.0
MA 155 Medical Assisting I	7.5
MA 165 Medical Assisting II	8.5
Additional Courses (6.0 units from the following):	6.0
BIOL 8 or LVN 114 Human Biology or Anatomy, Physiology, and Microbiology (Area A)	3.0
BUS 1A Principles of Accounting	4.0
BUS 12 Keyboarding Skills Development	1.0
BUS 14M Advanced Keyboarding Medical	1.0
HO 15 Nutrition	3.0
SOC 1 Intro to Sociology	3.0
SOC 2 Social Problems	3.0
Electives	14.0

[MA] Certificate of Achievement, Medical Assisting

	Units
Total Units	31.0

Prerequisite: Eligibility for enrollment in ENGL 150 and MATH 106

Program Requirements	31.0
BUS 152 Business English	3.0
CIS 1/1L Computer Literacy/Lab	3.0
MA 152 Medical Terminology	3.0
MA 155 Medical Assisting I	7.5
MA 165 Medical Assisting II	8.5
PSYCH 33 or PSYCH 1 Personal Growth & Adjustment or General Psychology	3.0
SPCH 7 Interpersonal Communication	3.0

NATURAL HISTORY [NH]

This program provides educational opportunities for students seeking careers related to biological inventories, rare and endangered species, and environmental education. The specific program is

- Certificate of Completion, Natural History

[NH] Certificate of Completion, Natural History

	Units
Total Units	16.5
Program Requirements	16.5
Specific Courses	11.0
BIOL 17 or FOR 51 Wildflowers, Trees, & Shrubs or Dendrology	2.0
BIOL 20 Natural History	3.0
BIOL 21 or BIOL 23 Mushroom of North Coast or Lichens of Northern California	2.0
BIOL 40 Independent Study	1.0
ENVSC 10 Intro to Environmental Science	3.0
Additional Courses (1.0 unit from the following):	1.0
GEOL 40 Independent Study	1.0
GEOL 130E Geology of the N. Coast Ranges	0.5
GEOL 130F Geology of Clear Lake Volcanoes	0.5
GEOL 130G Coastal Geology	0.5
GEOL 1 General Geology	4.0
GEOL 10 Environmental Geology	3.0
Additional Courses (4.5 units from the following):	4.5
BIOL 1 General Biology	3.0
BIOL 9 Plants & Civilization	3.0
BIOL 15 Marine Biology	3.0
BIOL 16 Intro to N. Coast Birds	2.0
BIOL 17 Wildflowers	2.0
BIOL 19 Rare Plants	2.0
BIOL 22 Calif. Plant ID	3.0
BIOL 23 Lichens of Northern California	2.0
BIOL 35 Field Studies in Biology	1.0
BIOL 99 Selected Topics in Biology	1.0
BIOL 120E Intertidal Ecology	0.5
BIOL 120F Intro to Mushroom ID	0.5
BIOL 120H Wildflowers of the Coniferous Forest	0.5
BIOL 120I Coastal Wildflower ID & Ecology	0.5
BIOL 120J Natural History Interpretive Methods	0.5
BIOL 120K Marine Mammals of the N. Coast	0.5
BIOL 120L Bird Migration	0.5
BIOL 120M Intro to ID of North Coast Birds	0.5
BIOL 120N Mammals of Northern California	0.5
GEOL 1 General Geology	4.0
GEOL 3 Rocks & Minerals	4.0
GEOL 10 Environmental Geology	3.0
GEOL 40 Independent Study	0.5
GEOL 130E Geology of the North Coast Ranges	0.5
GEOL 130F Geology of the Clear Lake Volcanoes	0.5
GEOL 130G Coastal Geology	0.5
OCEAN 10 Intro to Oceanography	3.0

(continued)

(continued - Certificate of Completion, Natural History)

OCEAN 11 Intro to Oceanography Lab	1.0
OCEAN 12 Environmental Oceanography	3.0
METEO 1 Intro to Meteorology	3.0
ENVSC 99 Selected Topics in Environmental Science	1.0

NURSING (NURS)

Programs in this field provide educational opportunities for students seeking careers as Registered Nurses (RN). Upon program completion, students are eligible to take the National Council Licensing Exam for Registered Nursing (NCLEX-RN). Specific program options include:

- Associate of Science Degree, Registered Nursing
- Associate of Science Degree, LVN to RN
- Certificate of Achievement, LVN to RN

Note: For Associate of Science, Nursing and Certificates of Achievement, Nursing program progression and completion, a grade of "C" or better is required in all courses. For information on Nursing programs admission procedures and prerequisites, obtain the health Occupations Office or the department web page at: www.redwoods.edu/department/HO/programs.htm

[NURS] Associate of Science Degree, Registered Nursing

	Units
Total Units	82.5
General Education Requirements and Program Prerequisites	37.5
Core Courses (Area C, D2)	6.0
Specific Courses	28.5
BIOL 2 Microbiology (Area A)	4.0
BIOL 6 Anatomy	4.0
BIOL 7 Human Physiology	4.0
CHEM 2 Intro to Chemistry	5.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
MATH 106 Elementary Algebra (Area D3)	5.0
PSYCH 1 or 11 General Psychology or Life Span Development (Area B)	3.0
Additional Courses (3.0 units from the following):	3.0
ANTH 3 Cultural Anthropology	3.0
SOC 1 Introduction to Sociology	3.0
SOC 2 Social Problems	3.0

(continued)

(continued - A.S. Degree, Registered Nursing)

Program Requirements	45.0
Specific Courses	45.0
NURS 10A Pharmacology in Professional Nursing I	2.0
NURS 10B Pharmacology in Professional Nursing II	2.0
NURS 11 Pharmacology Skills	1.0
NURS 21 Nursing Science & Practice I	7.0
NURS 22 Nursing Science & Practice II	8.0
NURS 23 Nursing Science & Practice III	8.0
NURS 24 Nursing Science & Practice IV	10.0
NURS 51 Nursing Skills I	2.0
NURS 52 Nursing Skills II	1.0
NURS 53 Nursing Skills III	1.0
HO 15 Nutrition	3.0

[NURS] Associate of Science Degree, LVN Career Mobility

	Units
Total Units	60.5

Prerequisite - Credential Licensure as a Vocational Nurse

General Education Requirements and Program Prerequisites	33.5
Core Courses (Area C)	3.0
Specific Courses	27.5
BIOL 2 Microbiology (Area A)	4.0
BIOL 7 Human Physiology	4.0
CHEM 2 Intro to Chemistry	5.0
ENGL 150/150L College Reading & Writing/Lab (Area D1)	3.5
MATH 106 Elementary Algebra (Area D3)	5.0
PSYCH 1 or 11 General Psychology or Life Span Development (Area B)	3.0
SPCH 1 or 7 Public Speaking or Interpersonal Communication (Area D2)	3.0
Additional Courses (3.0 units from the following):	3.0
ANTH 3 Cultural Anthropology	3.0
SOC 1 Introduction to Sociology	3.0
SOC 2 Social Problems	3.0
Program Requirements	22.0
Specific Courses	22.0
NURS 11 Pharmacology Skills	1.0
NURS 23 Nursing Science & Practice III	8.0
NURS 24 Nursing Science & Practice IV	10.0
NURS 53 Nursing Skills III	1.0
NURS 60 LVN-RN Transition Concepts	2.0
Electives	5.0

Photo: Paul DeMark

[NURS] Certificate of Completion, LVN Career Mobility - 30 unit option

Prerequisite - Credential Licensure as a Vocational Nurse

Program Requirements	30.0
BIOL 2 Microbiology	4.0
BIOL 7 Human Physiology	4.0
NURS 11 Pharmacology Skills	1.0
NURS 60 LVN-to-RN Transition Concepts	2.0
NURS 23 Nursing Science & Practice III	8.0
NURS 24 Nursing Science & Practice IV	10.0
NURS 53 Nursing Skills III	1.0

REAL ESTATE [RE]

This program provides educational opportunities for students seeking careers related to real estate. Upon completion of the program, students are eligible to take the California Real Estate Sales and Broker's License Exam. The specific program is

- Certificate of Achievement, Real Estate

[RE] Certificate of Achievement, Real Estate

	Units
Total Units	30.0
Program Requirements	30.0
Specific Courses	18.0
RE 10 Real Estate Principles	3.0
RE 11 Real Estate Practice	3.0
RE 12 Real Estate Law	3.0
RE 13 Real Estate Finance	3.0
RE 14 Real Estate Appraisal	3.0
RE 15 Real Estate Economics	3.0
Additional Courses (12.0 units from the following):	12.0
RE 17 Real Estate Property Management	3.0
RE 18 Real Estate Investment Analysis	3.0
BUS 18 Business Law	3.0
BUS 69 Small Business Entrepreneurship	3.0
CIS 1/1L Computer Literacy/Lab	3.0

WELDING TECHNOLOGY [WT]

Programs in this field provide general and specific educational opportunities for students seeking careers requiring knowledge of welding techniques and procedures. Specific programs include:

- Certificate of Achievement, Welding Technology
- Certificate of Completion, Electric Arc and Oxyacetylene Welding
- Certificate of Completion, MIG and TIG Welding

[WT] Certificate of Achievement, Welding Technology

	Units
Total Units	24.0
Program Requirements	24.0
IT 60A Basic Manufacturing Blueprint Reading	3.0
IT 161 Technical Mathematics	3.0
MT 52 Ferrous Metallurgy	3.0
MT 62A Machine Shop Procedures	3.0
WT 53 Welding Procedures	2.0
WT 54 Welding Procedures	2.0
WT 56 Welding Procedures Lab	1.0
WT 67 Special Welding Laboratory	2.0
WT 90 MIG/TIG Welding	2.0
WT 91 MIG/TIG Welding Laboratory	1.0
WT 180 Welding Fabrication	2.0

[WT] Certificate of Completion, Electric Arc & Oxyacetylene Welding

	Units
Total Units	13.0
Program Requirements	13.0
IT 161 Technical Mathematics	3.0
MT 52 Ferrous Metallurgy	3.0
WT 53 Welding Procedures	2.0
WT 54 Welding Procedures	2.0
WT 56 Welding Procedures Lab	1.0
WT 180 Welding Fabrication	2.0

[WT] Certificate of Completion, MIG & TIG Welding

	Units
Total Units	13.0
Program Requirements	13.0
IT 161 Technical Mathematics	3.0
MT 52 Ferrous Metallurgy	3.0
WT 53 Welding Procedures	2.0
WT 90 MIG/TIG Welding	2.0
WT 91 MIG/TIG Welding Laboratory	1.0
WT 180 Welding Fabrication	2.0

1964-2004

1964

Dr. Eugene Portugal

Dr. Eugene Portugal selected as the first President of the College of the Redwoods, May 4, 1964.

The Redwoods Community College District was born by an overwhelming yes vote of Humboldt County voters on Jan. 14, 1964. By November 1964, the CR Site Committee decided to buy 160 acres owned by Thomas F. Bartlett, located about 10 miles south of Eureka off Highway 101. An additional 113 acres from three other adjacent ranches were subsequently purchased to bring the Eureka campus site to 273 acres.

Dr. Eugene Portugal, above, shown seated "at his desk" on the Eureka campus site around late 1964 or mid-1965, served as CR's first president and superintendent from May 1964 to June 30, 1972. In September 1965, he oversaw CR's first classes offered at Eureka High School and at eight branch sites stretching from Crescent City to Redway with approximately 1,500 students enrolled. The first 17 CR graduates enjoyed their commencement ceremony on the Humboldt State College on June 11, 1966.

Portugal also guided the construction of the Eureka campus's first buildings over the next five years - Physical and Life Sciences, the Forum, Library, Vocational-Technical, Physical Education, the student dormitories and student union.

On Sept. 25, 1967, 3,400 students began attending classes on the Eureka campus. The first commencement exercises for 192 students took place on the main campus on June 15, 1968.

COLLEGE OF THE REDWOODS

"Let the height of the redwoods stand for its lofty aspirations: their great trunks for its stability and strength: their spreading roots for its pervading influence among all segments of the community: and their eternity for its dedication to lasting values."

Dr. Homer Balabanis
Inauguration Address
October 6, 1965

CR ... your community college ... changing lives for 40 years!
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1964-2004

Photo: Paul DeMark

2004 Dr. Casey Crabill

Dr. Casey Crabill current President/Superintendent of the College of the Redwoods, 2004.

Dr. Casey Crabill assumed her title as CR's president/superintendent on July 1, 1999. Dr. Crabill is pictured above "at her desk," in August 2002 in a fond tribute to the original photograph of CR's first president, Dr. Eugene Portugal.

The photos differ dramatically as the building shown behind Dr. Crabill is CR's new $14.5 million Learning Resource Center. Designed to be the information gateway for the CR District, it opened on July 29, 2002. On Jan. 27, 2003, CR opened a sparkling new 10,800-square-foot Child Development Center behind the CR Gym - another jewel added to the Eureka campus.

Since the time Dr. Portugal was appointed 40 years ago to Dr. Crabill's current administration, CR has added vibrant branch campuses in Fort Bragg and Crescent City and established the Klamath/Trinity Instructional Site in Hoopa and the Arcata Instructional site in that city's industrial park. In 2004, approximately 7,500 students were enrolled.

Under Dr. Crabill's leadership, CR has established its mission as a "Learning College" where student success is the primary goal and life-long learning is actively encouraged for the staff and faculty, as well as students. An example of the college's commitment to staff development is the Center for Teaching Excellence. Dr. Crabill envisioned and helped create it with the CR Academic Senate in 2000 as a way to "preserve and promote excellence as the standard for instruction at CR…to better meet the needs of our students in an unpredictable and complicated society."

Photo's: Dana Wymer

Just another example of CR's constant search for new ways to positively change lives as it has been doing for 40 years.

CR ... your community college ... changing lives for 40 years!

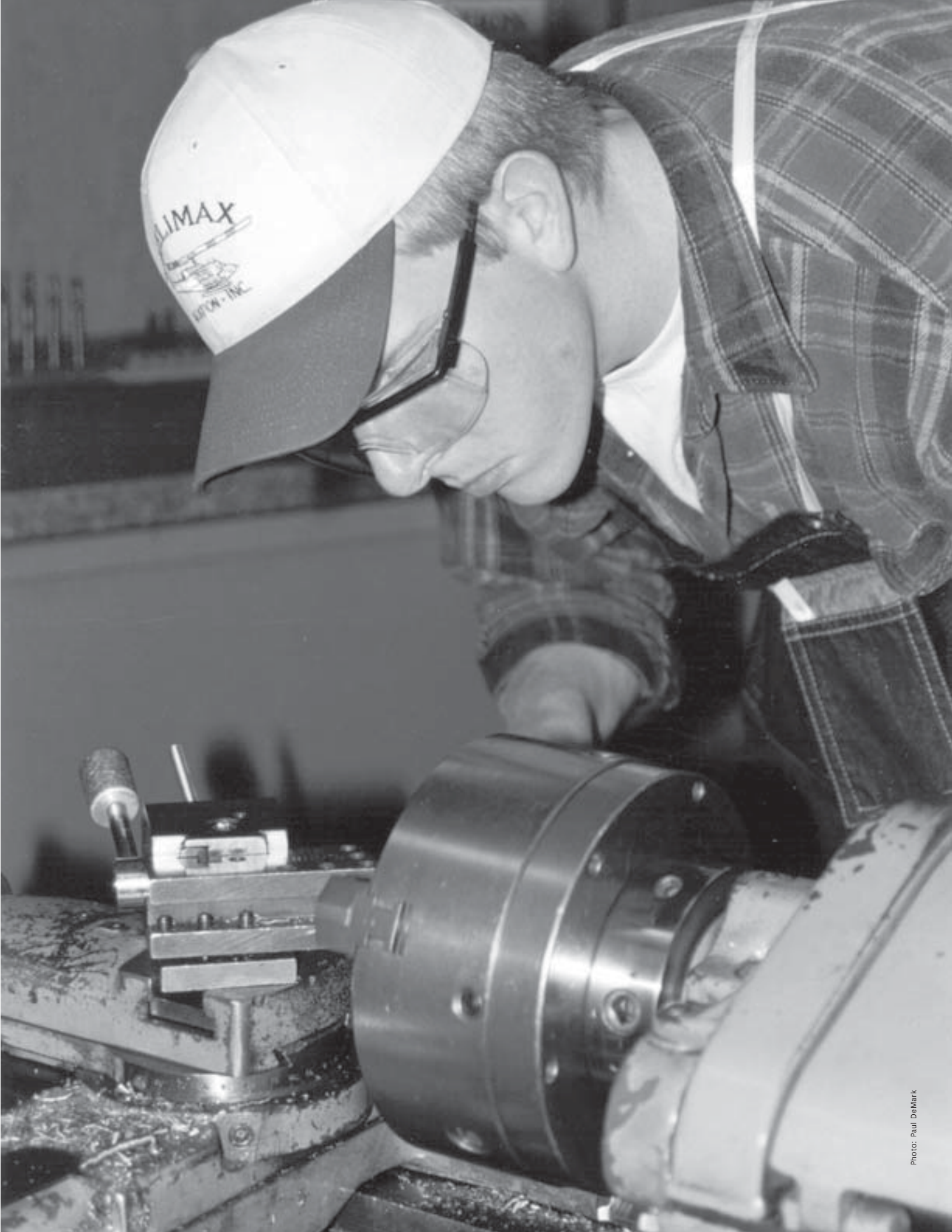

Photo: Paul DeMark

Course Descriptions

The following section lists the courses available to be offered by the college at the time this Catalog was printed. Not all courses are offered in any given semester, and additional courses may have been added since publication of this document. Please refer to the current Schedule of Classes for course offerings available in any specific semester.

Staff Photo's

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COURSE DESCRIPTIONS

HOW TO USE THE CATALOG

The catalog will guide you in your stay at College of the Redwoods. It contains information on courses, degree and other areas of campus life. It will help you plan for the future.

While using the catalog, keep in mind that, while it represents the variety of courses which can be offered at College of the Redwoods, we do not offer every course each semester. To find out the course offerings by semester, refer to the semester schedule.

Following is an example that will show you how to read the course descriptions.

Find a specific area of study by using the title (in bold face type).

HOW TO READ THE CATALOG

(1)(2) **MATH-22 Business Calculus**
(3)(4) *(4 units lecture)* An introduction to basic matrix operations and probability, and differential and integral calculus. This course also studies functions, limits, derivatives,
(5) integrals and their applications. *Prerequisite: MATH-120 (or the equivalent) with a "C" grade or better or the assessment recommendation for*
(6) *MATH-22, 25 or 30 Corequisite: MATH 152*
(7) *Recommended preparation: MATH-30*
(8) *Note: Graphing calculators are required.*
(9)(10) *Grade Only CSU and UC*
(11) *(CAN MATH34)*

EXAMPLE (above):
This example does not necessarily represent the actual characteristics of the course listed. It has been altered to present an array of available course description features.

(1) CR course number (required on registration forms)
(2) Title of course offering
(3) Unit value of course with type of instruction (lecture or lab or both)
(4) Brief description of course
(5) Prerequisite: course(s) required before taking this course; if none listed, not required.
(6) Corequisite: must be enrolled in listed course(s) during same semester; if none listed, not required
(7) Recommended preparation: course offering(s) giving background information for this course; if none listed, no preparation suggestion
(8) Note giving additional information specific to this course
(9) Grading method
(10) Indicates course is transferable to CSU or UC system as an elective
(11) California Articulation Number, cross-reference system identifying similar courses at other California institutions

INFORMATION IN THIS CATALOG IS SUBJECT TO CHANGE.
CONSULT THE CURRENT CLASS SCHEDULE AND
COLLEGE COUNSELORS FOR UP-TO-DATE INFORMATION.

Addiction Studies (ADCT)

ADCT-10 Introduction to Addiction Studies *(3 units lecture)* An overview of the historical and contemporary role of drugs in society emphasizing the physical, social, and emotional consequences of alcohol and other drug use and abuse within a general systems theory framework. Topics will include disease etiology, physiological aspects of addiction, major categories of drugs, prevention and treatment approaches, self-care, and professional/ethical considerations. *Grade Only CSU*

ADCT-11 Pharmacology and Physiology of Addiction *(3 units lecture)* Overview of physiological and pharmacological actions and effects of alcohol and other drugs. Course work examines how the body develops tolerance to drugs and how cycles of drug use and dependence develop. Also explored in depth is the impact of drug use/abuse upon society. *Grade Only CSU*

ADCT-12 Substance Abuse: Law, Prevention and Education *(3 units lecture)* An exploration of prevention theories and practices in the field of Addictions. Governmental drug control policies, legal enforcements, and educational and community strategies will be addressed and evaluated in terms of the social, economic and cultural milieu in the United States. *Grade Only CSU*

ADCT-13 Substance Abuse in Special Populations *(3 units lecture)* An examination of the special issues involved in the etiology, treatment and prevention of alcoholism and other types of substance abuse among specific populations of high risk groups with special concerns or problems unique to that population. *Grade Only CSU*

ADCT-14 Health, Nutrition and Addiction *(3 units lecture)* An exploration of the health consequences of addictive behaviors including eating disorders and the effect of the use, misuse, and abuse of drugs and alcohol on health and nutrition. *Grade Only CSU*

ADCT-15 Introduction to Counseling Skills *(3 units lecture / lab)* A presentation of the theoretical concepts of counseling for individuals, families, and groups. Processed role-plays help students to develop effective core counseling skills. Personal values, ethical, legal, and crisis intervention issues are also addressed. *Grade Only CSU*

ADCT-16 Addiction and the Family System *(3 units lecture)* An exploration of how family and community systems perceive the individual's development from childhood to adulthood emphasizing the intervention to interrupt addictive family patterns. *Grade Only CSU*

ADCT-17 Field Studies II *(3 units lecture / lab)* A seminar providing the advanced candidate with supervised field study with an approved services agency. Candidates will synthesize concurrent field experience through dialogue, videotaped exercises, and skill and technique demonstrations. *Note: Must be completing the final semester in the Addiction Studies program to enroll in this course. Grade Only CSU*

Adminstration of Justice (AJ)

AJ-1 Introduction to Administration of Justice *(3 units lecture)* A course which will cover the history and philosophy of the criminal justice system as it has evolved throughout the world. It will also provide an in-depth study of the American system and the various subsystems and the roles and role expectations of criminal justice systems in their interrelationships in society. *Grade Only CSU and UC (CAN AJ2)*

AJ-2 Introduction to Law Enforcement *(3 units lecture)* This course will survey and review the field of law enforcement as a profession. It will cover the historical development, current and future concepts and trends, and study the roles and functions of law enforcement agencies as components of the criminal justice system. An examination of the roles, duties, and responsibilities of law enforcement personnel and a survey of professional career opportunities will also be included. *Grade Only CSU*

AJ-3 Introduction to Corrections *(3 units lecture)* A basic introductory course for the field of corrections. Topics will include: the historical development, current concepts, and practices; explanations of criminal behavior; functions and objectives of the criminal justice system concerned with institutional, probation, and parole processes as they modify the offender's behavior; survey of professional career opportunities in public and private agencies. *Grade Only CSU*

AJ-4 Criminal Law *(4 units lecture)* A historical overview of the development of law. There is a review of constitutional provisions of law as they integrate with fundamentals of state law. Students will develop an appreciation of legal concepts as they relate to the justice process. Topics include: historical development, philosophy of law and constitutional provisions; definitions, classifications of crimes and their applications to the system of administration of justice; legal research, review of case law methodology and concepts of law as a social force. Explores crimes against persons, property and the state as a social, religious and historical ideology. *Grade Only CSU and UC (CAN AJ4)*

AJ-5 Crime and Delinquency *(3 units lecture)* This is a basic course in the sociological study of crime and its causes. Topics include: an introduction to major types of criminal behavior, characteristics of offenders, and factors which contribute to crime and delinquency; the criminal justice process; the function of law enforcement; the courts, probation, parole, and institutions; changes in criminal control and treatment process; the role of society. *Grade Only CSU*

AJ-6 Introduction to Evidence *(4 units lecture)* A course designed to provide students a working knowledge of evidence, evidentiary practices, and case laws referencing the admission of evidence at the lower division. This course serves as a base of reference for theoretically oriented courses at the upper division level. Topics include the following: origin, development, philosophy and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search and seizure; kinds and degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies viewed from a conceptual level. *Recommended preparation: AJ-4 Grade Only CSU (CAN AJ6)*

AJ-7 Community and Human Relations *(3 units lecture)* A course which studies the factors that create friction between the community and the criminal justice agencies. This is a systems wide approach which addresses the most critical areas of conflict in criminal justice and community interaction including: the relationship of criminal justice agents and the community, causal and symptomatic aspects of community understanding, lack of cooperation and mistrust, study of behavioral causes and ways to develop and maintain amicable relationships. *Grade Only CSU and UC*

AJ-8 Introduction to Investigation *(3 units lecture)* An introduction to the ethics and legalities of an investigation. Topics will include: fundamentals of investigation, techniques of crime scene search and recording, collection and preservation of physical evidence, modus operandi processes, sources of information, interview and interrogation and follow-up investigation. *Grade Only CSU (CAN AJ8)*

AJ-9 Communication Methods for Law *(3 units lecture)* An introduction to the practical aspects of collecting, organizing, and preparing written and oral reports for law enforcement activities. Students will perfect practical techniques for communicating facts, information, and ideas effectively, clearly, and logically for various criminal justice system written and oral presentations, including testimony in court. *Recommended preparation: eligibility for ENGL-150 Grade Only CSU*

AJ-10 Juvenile Justice *(3 units lecture)* A survey of the history of the juvenile justice system and its component parts. Students will study the classes of juvenile offenders, diversion programs, and the juvenile justice process. They will understand the various theories of juvenile behavior. Students will compare the legal rights of youthful offenders with those of adult defendants. *Grade Only CSU*

AJ-50 Control and Supervision of Inmates *(3 units lecture)* Students will learn the dynamics of inmate supervision in a correctional institution, security procedures, contraband control and prison atmosphere. The course will cover staff responsibilities and their application to inmate culture and institution characteristics. *Grade Only CSU*

AJ-51 Correctional Law *(3 units lecture)* This course is a survey of correctional programs from conviction to release at various levels of government from a legal perspective. Students will learn of laws dealing with the organization of state prisons, execution of sentence, terms of imprisonment and parole. Regulations concerning escapes, executive clemency and prison records will be introduced. *Grade Only CSU*

AJ-52 Correctional Interviewing and Counseling *(3 units lecture)* This course teaches the role of basic interviewing and counseling processes using appropriate techniques and theories in confidence building which may be used by the correctional employee in client interviews and counseling. The importance of an open and receptive attitude for learning and of the processes necessary for positive rapport and communication are stressed. *Grade Only CSU*

AJ-53 Ethnic Group Relations in a Custody Setting *(3 units lecture)* This course is a survey of minority roles, problems and relationships in correctional institutions and allied agencies. The impact and effect of stereotyping and prejudice in correctional work will be explored. Students will learn about the cultural and racial differences of clients and their effect on rehabilitation programs. *Grade Only CSU*

AJ-80 Basic Academy *(34.5 units lecture / lab)* A 922.5-hour training course certified by the California Commission of Peace Officer Standards and Training (POST) to meet statutory basic training requirements. This course requires both academic and physical skills in addition to a significant commitment in time and endurance for an intensive 23-week agenda. The Basic Academy provides instruction required by the State of California to meet minimum employment standards for peace officers. *Recommended preparation: ENGL-150 Note: Before enrolling, students must complete and pass: 1) A POST approved pre-entry English skills exam with a score of T42 2) Medical clearance by a licensed physician 3) Criminal history clearance including fingerprint submission to the Department of Justice pursuant to penal code requirements Grade Only CSU*

AJ-154 Probation Officer Core Course *(7.5 units lecture / lab)* A presentation of specific performance and instructional topics in probation. These topics include laws of arrest, roles and responsibilities, codes, and statutes, classification of inmates, assaultive behavior, and booking procedures. This course is approved by the State of California Standards and Training for Corrections Program. *Grade Only*

AJ-155 Juvenile Counselor Core Training Course *(6 units lecture / lab)* A presentation of specific core performance and instructional topics for juvenile counselors. The topics addressed in this course relate to those activities or tasks which are performed by Juvenile Counselors throughout the State, regardless of the location, size, or budget of the employing agency. This course is approved by the State of California Standards and Training for Corrections Program. *Grade Only*

AJ-170 Public Safety Dispatcher's Basic Course Justice *(5 units lecture / lab)* A training course certified by the Commission on Peace Officer Standards and Training (P.O.S.T.) designed to meet statutory training requirements for employment as a dispatcher for a public safety agency. *Recommended preparation: ENGL-150 CR/NC option*

AJ-187 Advanced Officer Training *(0.5 - 3.5 units lecture / lab)* A series of courses designed and scheduled to meet advanced officer training requirements for law enforcement personnel as established by the California Commission on Peace Officer Standards and Training (POST). The hours and units will vary for each course. Contact the Administration of Justice Department for an updated list of course offerings each semester. *Prerequisite: Completion of Basic Academy Grade Only*

AJ-187F Latent Print Development Techniques *(1 unit lecture / lab)* An advanced course taught by instructors from the Federal Bureau of Investigation (FBI). Topics include: packaging of evidence, powdering and lifting of latent prints, chemical development, photography, print comparison and fingerprint identification problems as associated with advanced fingerprint techniques. *Prerequisite: Completion of Basic Academy May be repeated to a maximum of two enrollments. Grade Only*

AJ-189 Corrections Officer Training: Core Course *(6.5 units lecture / lab)* A presentation of specific performance and instructional topics in corrections. These topics include laws of arrest, roles and responsibilities, codes and statutes, classification of inmates, assaultive behavior and booking procedures. This course is approved by the State of California Standards and Training for Corrections Department. *Note: Students not employed at correctional facilities will receive screening packets that must be submitted prior to course enrollment. Grade Only*

AJ-190F Penal Code 832 - Firearms *(0.5 unit lecture / lab)* A course of training in the carrying and use of firearms required for Level III reserve officers. The course meets the minimum standards prescribed by the Commission of Peace Officers Standards and Training (POST), as set forth in California Penal Code Section 832. IMPORTANT: Effective 1/1/99, Penal Code Section 13511.5, students enrolling in PC 832, AJ-190F, Firearms Class, and not sponsored by a local or other law enforcement agency, or is not a Peace Officer employed by a state or federal agency, department, or district, shall be required to submit written certification from the Department of Justice that applicant has no criminal history background which would disqualify him or her from owning, possessing, or having under his or her control a firearm. Contact the Administration of Justice Office, (707) 476-4334, to gain required materials and assistance to fulfill this requirement. This process can take up to two months. *Prerequisite: AJ-190S Note: Students will not be admitted to the firearms range until a record check has been completed. Students enrolling in this course must furnish a weapon, ammunition, and ear protection. CR/NC only*

AJ-190S Penal Code 832 *(2.5 units lecture / lab)* A course of training in the exercise of a peace officer's power to arrest and search a person suspected of committing a crime and the lawful seizure of items of evidence, techniques of arrest and communication skills. Meets the minimum standards prescribed by the Commission on Peace Officer Standards and Training (POST), as set forth in the California Penal Code, Section 832.6 (a) (3). *Grade Only*

AJ-191 Reserve Police Officer Training (Level II) *(4.5 units lecture / lab)* A course of training in the role of the backup officer as a trained reservist and his/her responsibilities working under the immediate supervision of a regular officer in the prevention and detection of crime and the general enforcement of the law. This course meets the requirements established by the Commission of Peace Officer Standards and Training (POST), as described in the California Penal Code Section 832. *Prerequisite: AJ-190F Grade Only*

AJ-193 Pre-Academy Training *(5 units lecture / lab)* An introduction to the requirements, scope, and commitments to the Basic Law Enforcement Academy and the law enforcement field. The course includes assessing potential academy students for job-related skills such as physical endurance, report writing, comprehension of penal codes, and ethical standards. *Grade Only*

Agriculture (AG)

AG-3 Introduction to Animal Science *(3 units lecture / lab)* The study of types, breeds and distribution of farm animals and their adaptation under various climatic and management conditions. Also covered will be production methods common to various livestock enterprises, marketing, slaughter and processing, physiology, anatomy, heredity, breeding and diseases. *CR/NC option CSU and UC*

AG-5 Horse Husbandry *(2 units lecture)* This course is an introduction to the light horse industry. Topics covered include purchasing considerations, breeds, temperament, conformation, unsoundness, selection criteria, feeding, ration formulation, reproduction, first aid, diseases and parasites. *CR/NC option CSU*

AG-6 Large Animal Disease *(3 units lecture)* A study of common diseases and parasites affecting farm animals principally: beef and dairy cattle, sheep, swine and horses with emphasis on sanitation, prevention, symptoms and treatment. *Grade Only CSU*

AG-7 Animal Feeds and Feeding *(3 units lecture)* This course covers the composition and identification of feeds and their uses in livestock nutrition. This will include the assimilation of feeds, processing, ration formulation, nutrient requirement guidelines and feeding methods as well as the use of the micro-computer in balancing rations. *CR/NC option CSU*

AG-11 Sustainable Animal Production *(3 units lecture / lab)* A study of small and large animal usage in a sustainable system including forage crops from non-tillable land and from crop rotation, animals as part of weed and soil management, and animal selection and utilization in a systematic management plan. *Recommended preparation: AG-3, AG-63 CR/NC option CSU*

AG-14 Principles of Landscape Design *(3 units lecture / lab)* Basic design principles are applied to the development of landscapes including actual site analysis and planning. *Grade Only CSU*

AG-15 Landscape Maintenance *(3 units lecture / lab)* This course is an introduction to and application of the skills and knowledge required by a maintenance gardener. It will include pruning, turf care, soils, fertilizing, pest control, irrigating, equipment maintenance and planting. *Grade Only CSU*

AG-16 Ornamental Plant Identification *(3 units lecture / lab)* This course will emphasize plants suited to this area and showed in the spring. Students will learn to identify plants used in landscaping and interior decoration and discuss their growth habits, uses and cultural requirements. *Grade Only CSU and UC (CAN AG18)*

AG-17 Introduction to Soils *(3 units lecture / lab)* This course will cover soil derivation, classification and general characteristics. Other topics will include properties of soil, soil evaluation, soil maps and their interpretation, use of soils and their management. Discussions will also cover soil moisture, structure, cultivation, texture, organic materials and microbiology. *Recommended preparation: knowledge of basic chemistry Grade Only CSU and UC (CAN REC8)*

AG-18 Soil Fertility and Fertilizers *(3 units lecture / lab)* A study of the management of a soil's fertility level relative to meeting specific plant requirements. Composition and use of both organic and inorganic fertilizer materials will be studied. Correctives for pH adjustment and high sodium soils, which include dealing with salt problems in California soils, will be covered. *Prerequisite: AG-17 Grade Only CSU*

AG-19 Weeds and Weed Control *(3 units lecture / lab)* Identification and control of common, noxious and poisonous weeds found in California, with emphasis on the local area. Weed control in crop-land, pastures, landscaping and non-crop areas will also be covered. *Grade Only CSU*

AG-21 Plant Propagation *(3 units lecture / lab)* A discussion of the principles of sexual and asexual propagation of plants with practice in propagating plants by seeding, cuttings, budding, grafting, division, layering, and micro- propagation. *Grade Only CSU*

AG-22 Sustainable Vegetable Production *(3 units lecture / lab)* An introduction to the commercial production of vegetable crops, especially those of local importance. Students will research specific cultural practices, variety selection, and marketing needs. Commercial scale and sustainable practices are emphasized. *Recommended preparation: AG-17, 23, 63 Grade Only CSU*

AG-23 Introduction to Plant Science *(3 units lecture / lab)* An introduction to basic plant biology. Students conduct experiments illustrating basic principles of plant growth and development. The relationship to species diversity, population, climates, water utilization, air quality and similar environmental interactions resulting from growing plants of economic value will be discussed. *Grade Only CSU and UC*

AG-25 Landscape Construction *(3 units lecture / lab)* This course will include layout and construction of decks, patios, walks, borders, planters and steps. It will also cover site grading and plant installation. *Grade Only CSU*

AG-26 Landscape Plant Identification *(3 units lecture / lab)* This course will emphasize plants suited to this area and showy in the fall. The student will learn to identify plants used in landscaping and interior decoration and discuss their growth habits, uses and cultural pre-requirements. *Grade Only CSU*

AG-27 Nursery Practices *(3 units lecture / lab)* An exploration of the cultural practices used by nurseries in growing nursery crops. Topics include soils, fertilizers, lighting, pests, watering, temperature control, and plant manipulation. Retailing is also discussed. *CR/NC option CSU*

AG-29 Pest Management *(1 unit lecture)* An overview of the types of organisms causing harm to plants and a presentation of management concepts for pests and diseases, related safety and environmental concerns, laws, and regulations. *Grade Only CSU*

AG-31 Farm Business Management *(3 units lecture / lab)* This course discusses the decision- making process including the tools of decision-making, acquisition and organization of the factors of production. Also covered will be managing the organized farm, the influence of change on farm organization and management. Students will learn the efficient use of credit, equipment and labor. *Grade Only CSU*

AG-35 Agricultural Sales and Merchandising *(3 units lecture)* Agricultural sales and merchandising represents one of the major components of agriculture business. This course identifies the opportunities that exist in ag sales, both for the specialized inputs that are used in production as well as the selling of the output of production. Emphasis is placed on the techniques being used in the selling and merchandising process. *CR/NC option CSU*

AG-36 Farm Accounting *(3 units lecture / lab)* This course covers the fundamentals of record keeping; kinds of records, inventory, depreciation, payrolls; cash system income tax reporting; and the preparation and analysis of financial statements. *Recommended preparation: AG-37 Grade Only CSU*

AG-39 Field Experience *(1 unit lab)* The practical application of skills needed to be successful in agriculture, plant science, and ornamental horticulture. This course extends the opportunity to practice skills learned in classes by applying them in a real setting. *Prerequisite: Complete 6 units of AG Note: Field trips are required. The college does not provide transportation. May be repeated to a maximum of four enrollments. Grade Only CSU*

AG-46 Computers in Agriculture Management *(3 units lecture / lab)* A course in the application of microcomputers to the management of agricultural operations and businesses including livestock, crop and financial management. *Recommended preparation: CIS-1 CR/NC option CSU*

AG-63 Introduction to Organic/Sustainable Agriculture *(2 units lecture)* Provides a working knowledge of all phases of production of vegetables, fruits, and flowers. Principles of sustainable production will be emphasized. Farming using organic fertilizers and pest control will be emphasized. The course will include topics such as proper cultivar selection, basic soil problems, amendments, pest and disease problems, harvesting, and the other related topics. *Note: Recommend that students who want practical experience in growing crops sign up for AG-63L. CR/NC option CSU*

AG-63L Introduction to Organic/Sustainable Agriculture - Lab *(1 unit lab)* Study and practice in growing fruit and vegetables in the field. Students will grow crops on grounds provided by the college. Students will prepare soil, plant, weed, and harvest cultivars of vegetables that grow well on the north coast. Techniques of organic and sustainable agriculture will be emphasized. *Prerequisite: AG-63 or other appropriate crop production class. OR Corequisite: AG-63 CR/NC option CSU*

AG-65 Agriculture Enterprise Project *(1 unit lecture)* Prepares students to select and plan for a management/ production project. Actual projects are subject to approval by the instructor and Farm Manager. Lecture includes project budgeting, schedule planning, marketing and market arrangements, record keeping, and related planning necessary for success in execution of the selected project. *May be repeated to a maximum of two enrollments. CR/NC only CSU*

AG-65L Agriculture Enterprise Project Lab *(1 - 3 units lab)* Execution of the project plans developed in AG-65. Actual projects are subject to approval by the instructor and Farm Manager. The appropriate college staff supervised project. *Prerequisite: DHET-166 or equivalent, AG-65 Recommended preparation: varies with project Note: Courses needed for the safe and technical execution of the project may be necessary for the specific enterprise. May be repeated to a maximum of three enrollments. CR/NC only CSU*

Anthropology (ANTH)

ANTH-1 Physical Anthropology *(3 units lecture)* An introduction to physical anthropology taught within the framework of evolutionary theory. To show how social and biological sciences are related, the course is organized into four major parts; evolutionary theory, nonhuman primates, human evolution, and human variation. In this last section, some study of the impact of inherited disease is presented. *Grade Only CSU and UC (CAN ANTH2)*

ANTH-2 Introduction to Archaeology *(3 units lecture / lab)* An introduction to archaeological methods, theories and application of techniques used to learn about and interpret the life-ways of past cultures. Students will learn about all of the steps involved in the planning, design, management, and conduct of archaeological investigations, including topics such as sampling, mapping methods, excavation strategies, the application of dating techniques, artifact and eco-fact analyses, and horizontal pattern analyses. Additionally, topics such as the legal and ethical responsibilities of archaeologists and job opportunities for archaeologists will be discussed. *Grade Only CSU and UC*

ANTH-3 Cultural Anthropology *(3 units lecture)* An introduction to cultural anthropology that offers students an understanding of other peoples in different times and places. Students study the concept of culture and the contents of two specific cultures, the Yanomamo and Modern Maya. Survival, sex, marriage, family, and religion will be discussed by students and the instructor with cultural change and comparisons made. *Grade Only CSU and UC (CAN ANTH4)*

ANTH-4 Folklore *(3 units lecture)* Students will collect, study and analyze forms of folklore such as folk-speech, superstitions, gestures, graffiti, etc. Emphasis will be on the analysis of collections and the use of folklore as a tool for understanding domestic and foreign cultures. *CR/NC option CSU and UC*

ANTH-5 Great Archaeological Discoveries *(3 units lecture)* A survey of data from noted archaeological sites from around the world. Sites to be discussed in the course will include a variety of cultures from around the world, from the beginning of human history through recent historical occupations. Additionally, the course will explore relationships between archaeologists, the media, and the public. *Grade Only CSU and UC*

ANTH-6 Forensic Anthropology *(3 units lecture)* An examination of the science of solving crimes with anthropological data, especially that from human skeletal remains. Basic human skeletal anatomy will be taught in order to set the stage for examining details of criminal investigations. Students will learn how to initially estimate the sex and age of a given individual based on skeletal features. This course will outline the potential that forensic anthropology holds for the determination of population, cause of death, and individual identification. The benefits and problems presented by DNA analysis will be presented. Well-known case studies from around the world will be discussed and the cultural consequences of forensic analyses will be examined. *Grade Only CSU*

ANTH-100 Essentials of Anthropology *(3 units lecture)* An introduction to the basic concepts and controversies in the four subfields of anthropology (cultural anthropology, physical anthropology, archaeology, and linguistic anthropology). Students will be encouraged to improve their reading, writing, and critical thinking skills through a series of classroom activities and several writing assignments. This course is designed to provide the basic terminology and an introduction to key controversies in anthropology that are covered in greater depth in ANTH-1, 2, 3, 4, and 5. *Note: Students in this class are required to be enrolled in the co-requisite, Anthropology-theme English 150 course. Grade Only*

Aquaculture (AQUA)

AQUA-10 Introduction to World Aquaculture *(2 units lecture)* This course is designed to provide students with a practical overview of dynamic world aquaculture to include; history, present status and future with emphasis placed on the importance of aquaculture in the world food supply. Will include general culture concepts and techniques of various species in various geographic regions. This course will emphasize the strong relationship between Aquaculture and Agriculture and its vital role to the continuance of the human race. *CR/NC option CSU*

AQUA-15 Introduction to Fishery Biology *(3 units lecture / lab)* A study of the natural history and ecology of major commercial fish and shellfish including identification, anatomy, life history, food habits, age and growth, and pollution in relationship to North Coast California fish and shellfish. Laboratory examination of local fishes will be related to factors listed above. *Note: Boots and rain gear are required. Field trips are required. Grade Only CSU*

AQUA-21 Applied Salmonid Propagation *(3 units lecture / lab)* This course is designed to demonstrate and involve students in experimental spawning, fertilization, incubation and culture techniques of salmonid fishes. Topics will include: selective breeding programs, gamete storage techniques, triploiding and sex specific production. The class would be divided into small groups that would be given opportunities to initiate and follow through on propagation and genetic experiments on specific populations of salmonid fishes.

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Accurate research and development laboratory practices to include record keeping and data analysis will be emphasized. *Grade Only CSU*

AQUA-25 Non-Salmonid Fish Cultures *(3 units lecture / lab)* Concepts and culture practices as applied to freshwater (other than Salmonids), brackish, marine fish, and shellfish including environmental requirements, life history, reproductive cycle as it relates to natural recruitment vs. hatcheries, grow-out systems, methods of harvesting, processing, and marketing. Laboratory work includes culturing of selected species and visiting local aquaculture sites. *Note: Field trips are required. Grade Only CSU*

AQUA-33 Commercial Invertebrates *(3 units lecture)* A course covering all invertebrate species caught commercially in North America. Areas covered include methods used to harvest species, brief life history of each species, and, if applicable, how they are cultured. *Grade Only CSU*

AQUA-41 Applied Northcoast Fisheries *(3 units lecture / lab)* An in-depth study of aquatic ecosystems in relation to anadromous salmonids and other anadromous and resident fishes of northcoast streams and lagoons. To include physical, chemical and biological factors of coastal watershed ecosystems from the headwaters to the estuary. Emphasis will be placed on familiarization with steam survey techniques and related fisheries agency criterion. An introduction to habitat restoration theory and application will also be included. *Grade Only CSU*

AQUA-42A Fish Habitat Improvement *(3 units lecture / lab)* This course is designed to provide students with knowledge and experience in stream surveying, design and implementation of stream enhancement projects and monitoring and evaluation of the same. Steam hydrology, fish biology and stream ecology are covered beyond the basic level. Specific interests and goals of individual students are taught to their appropriate level. *Grade Only CSU*

AQUA-150 Introduction to Northcoast Fisheries *(2 units lecture)* This course is designed as a comprehensive introduction on the history, present situation and future of California northcoast fisheries resources. Ramifications of user groups on the resource, political and social implications, forest harvest impacts, environmental impacts of other land usage and laws and regulations designed to protect and enhance the fisheries resources. Will devote attention to our anadromous salmonids and also deal with other coastal rivers near inland and offshore fisheries resources. Representatives of the major user groups will contribute as guest lecturers when appropriate. *CR/NC option*

Art (ART)

ART-1A Art History: Pre-History to Gothic *(3 units lecture)* Survey of visual arts from the pre- historic to the Gothic age. Cultures covered include the Ancient Near East, Egypt, Aegean, Greece, Rome, Medieval, Islamic, Romanesque, and Gothic. The focus will be on broad cultural and historical influences, unique periods and styles, and on the subtle psychology of individual artistic temperament. *Grade Only CSU and UC (CAN ART2)*

ART-1B Art History: Renaissance to Contemporary *(3 units lecture)* Survey of visual art of Western Europe from the fifteenth through the twentieth centuries, as well as contemporary art from Europe and America. The focus will be on broad cultural and historical influences, unique periods and styles, and on the subtle psychology of individual artistic temperament. *Grade Only CSU and UC (CAN ART4)*

ART-2 Introduction to Art *(3 units lecture / lab)* A course to provide beginning students studio and lecture experience in the visual arts. Students will undertake a series of projects using a variety of art materials such as paint, clay, film, ink, etc. *Grade Only CSU and UC*

ART-3A Beginning Sculpture *(3 units lecture / lab)* This is a beginning class in sculpture that will acquaint the student with various sculptural materials and their expressive possibilities. *CR/NC option CSU and UC (CAN ART12)*

ART-3B Intermediate Sculpture *(3 units lecture / lab)* This is an intermediate class in sculpture that will allow the student to experience working intensively with materials of his and her choice. The student will conceive, plan and execute a semester-length sculptural project based on developing a single concept or image or developing a sense of related pieces. *Prerequisite: ART-3A May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

ART-4 Art Appreciation *(3 units lecture)* An introduction to the world of visual art and the creative process as they relate to historical, cultural and personal issues. *Grade Only CSU and UC*

ART-5 Introduction to Tribal Art *(3 units lecture)* A survey of visual art from Native North American, African, and Oceanic cultures. Representative art forms from prehistoric times to the present illustrate the roles of both tradition and innovation in the creation of non-Western tribal arts and provide an awareness of the importance of a global perspective in the field of art history. *Grade Only CSU and UC*

ART-6 20th Century Art *(3 units lecture)* A detailed survey of modern art and architecture from the mid-nineteenth century to the present. Important artistic movements covered will include Impressionism, Art Nouveau, Fauvism, Cubism, Surrealism, Abstract Expressionism, Pop Art, and Post-Modern Art, among others. *Grade Only CSU and UC*

ART-10 Color and Design *(3 units lecture / lab)* This is an introduction to the various elements and principles upon which all visual art forms are structured such as: line, shape, texture, value and color. Color mixing and interaction will be emphasized. The student will explore design theory and principles such as directional movement, balance, dimension, proportion and composition. An inventive approach will be used emphasizing traditional and contemporary concepts. *CR/NC option CSU and UC (CAN ART14)*

ART-11 Three-Dimensional Design *(3 units lecture / lab)* An introduction to designing and constructing three-dimensional works in simple, inexpensive materials such as: paper, wood, plaster, clay, papier-mache, wire, etc. *Grade Only CSU and UC (CAN ART16)*

ART-14 Gallery Exhibition and Portfolio Development *(3 units lecture / lab)* An exploration of various professional careers in the visual arts. The practical aspects of professionalism are presented and include portfolio and resume preparation, gallery and exhibition management and exposure to professionals in the fine and commercial art fields. *Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

ART-16 Lettering and Layout *(3 units lecture / lab)* A course developed around the evolution of the alphabet. Emphasis will be given to calligraphic forms construction through pen, reed and brush with an introduction to concepts of layout in relationship to modern day design and commercial production. *May be repeated to a maximum of two enrollments. CR/NC option CSU*

ART-17 Drawing *(3 units lecture / lab)* Drawing problems are presented in sequence to build the skills and confidence necessary to express oneself visually. Required of the art major, recommended for the architecture major. *CR/NC option CSU and UC (CAN ART8)*

ART-18 Intermediate Drawing *(3 units lecture / lab)* A continuation of the basic drawing skills and techniques introduced in ART-17. Students will learn how to develop more refined skills while cultivating personal working methods and content within their drawings. They will learn about contemporary drawing issues and media. The course will also explore experimental and conceptual approaches to gathering and showing work. *Recommended preparation: ART-17 Grade Only CSU*

ART-18L Intermediate Drawing Lab *(2 units lab)* Designed for students who desire to further develop their drawing skills. Instructors provide instruction through an individual contract that encourages student exploration and personal direction. *Prerequisite: ART-18 May be repeated to a maximum of two enrollments. CR/NC only CSU*

ART-19 Figure Drawing *(3 units lecture / lab)* An introduction to all the fundamentals for drawing the living human form. Included will be exercises in structure, proportion, foreshortening portraiture, and anatomy. Students will also explore the expressive characteristics and narrative possibilities of the human form in both traditional and contemporary contexts. *Recommended preparation: ART-17 Note: Nude and clothed models are used in this course. Grade Only CSU and UC*

ART-20 Illustration *(3 units lecture / lab)* An intermediate level course designed to familiarize students with the skills and demands placed upon the commercial illustrator. Weekly assignments will address a variety of applications in black and white and color from cover art through cartooning and book illustration. *Prerequisite: ART-17 Recommended preparation: ART-10 May be repeated to a maximum of two enrollments. Grade Only CSU*

ART-22 Watercolor *(3 units lecture / lab)* Projects will be given in water-based media with both opaque and transparent techniques. Work will be done from still life and landscape. Required of the art major and recommended for the architecture major. Many field trips (the College does not provide transportation) will be taken to utilize local subject matter for painting. *Prerequisite: ART-10 or ART-17 May be repeated to a maximum of two enrollments. CR/NC option CSU and UC*

ART-23 Painting *(3 units lecture / lab)* The principles of painting using traditional and experimental approaches with emphasis on basic techniques and composition. Oil and synthetic media are used. *Recommended preparation: ART-10 or ART-17 May be repeated to a maximum of two enrollments. CR/NC option CSU and UC (CAN ART10)*

ART-26 Sculpture From the Figure *(3 units lecture / lab)* This is a course in which the figure is used as the starting point for sculpture in a variety of materials including clay, cast stone and plaster. The student will explore the figure as a source of both form and content and will be encouraged to use the figure realistically, expressively and abstractly in the development of works of art. *Recommended preparation: ART-3A or ART-19 May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

ART-28 Figure Painting *(3 units lecture / lab)* This course focuses on the discipline of figurative painting. It is the logical extension of figure drawing with the increased opportunity to work with paint media. Additionally, the class will explore in-depth the areas of anatomy, composition, color, portraiture, light and shadow on the figure, facial expression and the illusion and drapery of the figure. *Recommended preparation: ART-19 or ART-23 May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

ART-31A Introduction to Ceramics *(3 units lecture / lab)* An introductory class in ceramic exploration for students with little or no previous experience. The student will learn and practice techniques used to produce ceramic forms both functional and nonfunctional. *CR/NC option CSU and UC (CAN ART6)*

ART-31B Ceramics (Wheel) *(3 units lecture / lab)* A beginning class in ceramics using the potter's wheel to explore ceramic forms. An introduction to basic glaze chemistry and kiln procedures will be presented. *Prerequisite: ART-31A May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

ART-32 Experimental Ceramics *(3 units lecture / lab)* An intermediate level class for continuing students in ceramics with an emphasis on experimental directions in clay and glazes. *Prerequisites: ART-31B May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

ART-35 Photography *(3 units lecture / lab)* A course in black and white photography including camera operation, film exposure and development, print enlarging techniques and print presentation. Emphasis will be placed on development of basic visual and technical skills, sensitizing of environmental awareness through picture making assignments and the subjects and styles of major photographers and on developing an understanding of photography as a functional tool of visual communication. More advanced or repeating students will receive instruction in a range of techniques used to make fine prints while refining visual, compositional and aesthetic ideas photographically. Students will be encouraged to explore topics of personal interest to develop individual visual expression. *May be repeated to a maximum of two enrollments. CR/NC option CSU and UC (CAN ART18)*

ART-36 Color Photography *(3 units lecture / lab)* An introduction to the theory, practice and aesthetics of color photography. It encompasses the seeing, shooting, processing and printing of color slide and negative materials. It emphasizes development of both technical and visual skills as well as a practical knowledge of the uses of color in relation to the range of fine art and career color photography in practice today. *Prerequisite: ART-35 May be repeated to a maximum of two enrollments. Grade Only CSU*

ART-37 Experimental Photography *(3 units lecture / lab)* A survey of creative and non- traditional photographic techniques. Students will experiment with light sensitive materials and photo-print making processes in order to expand their understanding of materials and techniques. Emphasis will be placed on experimentation and exploration of the possibilities of completion of experimental photographs using drawings, paintings, or some other two- and three-dimensional art processes. *Prerequisite: ART-35 May be repeated to a maximum of two enrollments. Grade Only CSU*

ART-38 Landscape Photography *(3 units lecture / lab)* A course designed to photographically explore the landscape. Emphasis will be placed on individual exploration of past and present modes of landscape photography. Field assignments will encourage the exploration of our varied local landscapes. Class demonstrations and assignments will encourage development of individual technical and visual skills and in defining a personal philosophy regarding the landscape. *Prerequisite: ART-35 May be repeated to a maximum of two enrollments. Grade Only CSU*

ART-39 Commercial Photography *(3 units lecture / lab)* Introduction to applications of photography in the contemporary marketplace. Instruction will cover various aspects including technical, aesthetics, basic management and fundamental legal aspects of a wide range of commercial photography and photo-related careers. Emphasis will be placed on providing information on a wide range of careers. It would include how and where to get formal training and education as well as first-hand visits to work places of various career photographers. *Prerequisite: ART-35 or ART-36 May be repeated to a maximum of two enrollments. Grade Only CSU*

ART-43A Basic Digital Imaging *(3 units lecture / lab)* An introduction to current photographic computer technology. Focus is on computer manipulation of photography as currently used in graphic design, commercial photography, fine art photography and communication media fields. *Grade Only CSU and UC*

ART-43B Intermediate Digital Imaging *(3 units lecture / lab)* An intermediate level of study enabling students to expand their capabilities in computerized electronic imaging. Intermediate techniques in the manipulation, alteration, and enhancement of digital photography will be emphasized. This in-depth exploration will provide the student with skills to create his/her own expressive images and explore the various electronic methods of input and output. This course is designed for students who have a basic knowledge of digital imaging. *Prerequisite: ART-43A Grade Only CSU and UC*

ART-44 Introduction to Printmaking *(3 units lecture / lab)* This class will introduce students to the four basic types of printmaking: intaglio, relief, planographic and stencil (screen printing). Students who have skills and interests in drawing and painting will learn how unique works of art such as a watercolor might be translated into multiples through such processes as woodblock print, serigraphy and engraving. *Recommended preparation: ART-10 and ART-17 CR/NC option CSU and UC*

ART-45 Printmaking - Silkscreen and Relief *(3 units lecture / lab)* Projects in graphic design utilizing the techniques required for silk- screen and relief printing will be done. *Recommended preparation: ART-10 and ART-17 May be repeated to a maximum of three enrollments. Grade Only CSU and UC*

ART-47 Etching Techniques *(3 units lecture / lab)* This class will introduce students to intaglio printmaking. It is designed for students who are interested in drawing and expanding their drawings skills with print- making techniques. The techniques will include black line, tone and a variety of texture- generating processes. Students will examine artistic concerns for paper, inks and archival preservation of artwork. Students will discover the meaning of an original print. *Prerequisite: ART-17 May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

ART-52 Open Lab for Art *(1 unit lab)* Designed for students who desire to further develop their skills in a variety of art media. Instructors provide instruction through an individual contract that encourage student exploration and personal direction. *Corequisite: enrollment in a studio art course. May be repeated to a maximum of four enrollments. CR/NC option CSU and UC*

ART-53 Photography Lab *(0.5 - 3 units lab)* A course designed to develop greater skills in photography darkroom and printing techniques. Variable 0.5-3 units, 1.5-9 lab hours per week. Units offered may vary by semester. *May be repeated to a maximum of four enrollments. CR/NC only CSU*

ART-54 Drawing Lab *(1 unit lab)* The drawing lab shall serve as an environment for those wishing to pursue a personal direction using any drawing media. *Prerequisite: ART-17 May be repeated to a maximum of three enrollments. Grade Only CSU and UC*

ART-55 Lettering Lab *(1 unit lab)* A course designed to further skills in the area of calligraphy and or lettering. New ideas and techniques will be explored. *Prerequisite: ART-16 May be repeated to a maximum of three enrollments. Grade Only CSU*

ART-56 Figure Drawing Lab *(1 unit lab)* A course designed to develop greater skill in drawing from the human form. Both classical and experimental directions will be encouraged. *Prerequisite: ART-19 Note: Nude and clothed models are used in this course. May be repeated to a maximum of three enrollments. Grade Only CSU and UC*

ART-57 Painting Lab *(1 unit lab)* A course designed to explore the painting area in depth. Emphasis on media exploration. Individual directions will be encouraged. *Prerequisite: ART-20, 22, or 23 May be repeated to a maximum of three enrollments. Grade Only CSU and UC*

ART-58 Printmaking Lab *(1 unit lab)* This course is designed to further skills in the area of printmaking. New ideas and processes will be explored, including combinations of relief, intaglio, planographic and stencil techniques in a single image. *Prerequisite: ART-45 or ART-47 May be repeated to a maximum of three enrollments. Grade Only CSU and UC*

ART-59 Ceramics Lab *(1 unit lab)* The ceramics lab was designed for the student who wants to concentrate or focus on a particular area of ceramics. *Prerequisite: ART-31A or ART-31B May be repeated to a maximum of three enrollments. Grade Only CSU and UC*

ART-60 Jewelry *(3 units lecture / lab)* A course designed to introduce students to the necessary skills and techniques for the designing and construction of jewelry. Basic hand processes in fabrication methods in copper, brass, silver and gold to include soldering, riveting, forging, stone setting, etc. will be included. A slide study of historic and contemporary examples will be shown. *May be repeated to a maximum of two enrollments. Grade Only CSU*

ART-60L Jewelry Lab *(2 units lab)* This course will concentrate on personal development in the jewelry arts. Students will participate in a variety of individual and group assignments based on their goals for the semester. *Prerequisite: ART-60 May be repeated to a maximum of three enrollments. Grade Only CSU*

ART-61 Basic Weaving and Textile Processes *(3 units lecture / lab)* This course is an introduction to weaving and basketry, including twining, coiling, plaiting, design and form, color and dyeing of fiber, yarns, pattern drafting, tools, collection and use of materials, philosophy and tradition. The student will also be introduced to a variety of textile processes including: felt making, card weaving and Inkle or band weaving and weaving on portable small looms, table looms and frame looms. *May be repeated to a maximum of two enrollments. CR/NC option CSU*

ART-62 Weaving *(3 units lecture / lab)* The course covers the foundation of weaving. Topics such as plain weaves, twills, tapestry, rug knots, lace weaves and pattern weaves will be explored. The course also includes an exploration of tapestry looms and four-harness looms. Traditional and contemporary weaving styles will be presented. Topics also include pattern drafting, yarn calculations, yarns and fibers, finishes and design principles related to weaving. *May be repeated to a maximum of two enrollments. CR/NC option CSU*

ART-62L Weaving Lab *(2 units lab)* This course is designed for further development of weaving skills. A variety of assignments will explore advanced woven structures as well as experimental materials and processes. Individual direction will be encouraged. *Prerequisite: ART-62 May be repeated to a maximum of four enrollments. Grade Only CSU*

ART-63 Fibers, Yarns and Fabric *(3 units lecture)* An introduction to fibers and the construction of yarns and fabrics. Consideration will be given to the chemistry and characteristics of fibers and how these factors affect the resulting yarns and fabrics. Fabrics also will be studied for structure as well as for suitability for printing, dyeing, finishing and other textile uses. *CR/NC option CSU and UC*

ART-64 Fabric Print and Dyeing *(3 units lecture / lab)* Topics covered in this course include: An introduction to fabric printing and dyeing; fabric painting; block and stencil printing; resists such as batik, gutta, tie-dye and stitch dye; screen painting; and other surface design processes. Topics also include the characteristics and appropriate use of fabrics, dyes and textile paints. Color and design, especially patterning, are also addressed. *May be repeated to a maximum of two enrollments. Grade Only CSU*

ART-67 Documentary Photography *(3 units lecture / lab)* A course that will survey past and present uses of documentary photography. Creative projects will explore the traditions and uses of the photograph as documentation. Emphasis will be placed on the production of a documentary portfolio that exemplifies the student's individual ideas and concerns in the field of documentary photography. *Prerequisite: ART-35 May be repeated to a maximum of two enrollments. Grade Only CSU*

ART-69 Textile History *(3 units lecture)* A survey of textiles from prehistory to the present. This course will consider the role of textiles in history and in cultures. Some topics to be considered are: tools and techniques; belief systems; rituals; centers of production and trade; fashion and costume; design styles, aesthetics, and motifs. Several cultures/textiles will be studied in depth. *Grade Only CSU*

ART-70 Environmental Sculpture *(1 unit lecture / lab)* This class will cover the aesthetic and physical process of making a sculpture in the environment. Students will make a permanent work of art as a group project(s). Selection of appropriate materials and site will be emphasized as well as structural engineering and creative design. *May be repeated to a maximum of three enrollments. Grade Only CSU and UC*

ART-71 Stained/Leaded Glass *(3 units lecture / lab)* A study of skills, techniques and materials related to fundamental mastery of the art of leaded stained glass. *CR/NC option CSU*

ART-87 Techniques in the Visual Arts *(1 unit lecture / lab)* This course will introduce the student to advanced techniques used by artists in the field of visual arts. It will combine lecture/demonstrations on these techniques and through a mandatory project provide the student with the opportunity of experiencing the presented method. *May be repeated to a maximum of three enrollments. Grade Only CSU*

ART-110 Art for the Person With Disabilities *(2 units lecture / lab)* A course to aid students physically in their abilities to participate in basic art skills. Course will provide disabled students with a series of projects using a variety of materials adapted to meet their individual needs. Participation in this course is contingent upon participation in the Student Educational Contract (SEC). *May be repeated to a maximum of four enrollments. CR/NC only*

ART-146 Monoprint Techniques *(1 unit lecture / lab)* This course is designed to introduce students to the Painterly Print. Monotypes are one-of-a-kind images created with oil-based pigments worked over metal, plastic, or low relief plates and printed on absorbent printing paper. While the process is centuries old, its great popularity among artists and dealers has surfaced only in the last decade. Students will develop images using black field manner: collage polychrome and multiple-run monotypes and monoprints. *Recommended preparation: ART-17, ART-22, and ART-23 Grade Only*

ART-150 Techniques in Eastern Papermaking *(1 unit lecture / lab)* An introduction to the centuries old techniques of Eastern papermaking. Students will learn how to collect and process native and imported fibers suitable for papermaking. They will learn fiber properties and formative techniques that yield fine quality handmade papers. This course will also explore coloring and decorative techniques in making Eastern style papers. *May be repeated to a maximum of three enrollments. CR/NC option*

ART-151 Techniques in Western Papermaking and Papercasting *(1 unit lecture / lab)* An introduction to the Western tradition of papermaking and paper casting. Students will learn how to collect and process native and imported fibers suitable for papermaking. Students will learn how to process appropriate fibers including recyclable papers suitable for hand papermaking and casting as 3-D art. They will explore fiber properties, additives, and formation techniques appropriate to produce fine quality art paper and sculpture. Emphasis will be placed upon the use of paper pulp as a fine art medium. *May be repeated to a maximum of three enrollments. CR/NC option*

ART-155 Mosaic Techniques *(1 unit lecture / lab)* Studio course in Mosaic Techniques, which includes brief history, exploration of direct and indirect application of mosaic with emphasis on color and design. Students will also use modern applications: cracked tile, bas-relief, pique anisette, and sculpture. *CR/NC option*

ART-163 Rug and Tapestry Weaving *(3 units lecture / lab)* Topics include: An investigation of various loom-controlled as well as finger-controlled weaves appropriate to both weft and warp faced rugs. An introduction to traditional as well as contemporary tapestry weaving techniques. *Prerequisite: ART-61 May be repeated to a maximum of two enrollments. Grade Only*

ART-165 Fabric Printing *(3 units lecture / lab)* Special investigation into various aspects of fabric printing — block, stencil, resist printing, screen processes including photo emulsions, etc. Topics include lecture/ demonstration of techniques used for increasing production and focusing on depth rather than breadth. *Prerequisite: ART-64 May be repeated to a maximum of two enrollments. Grade Only*

ART-166 Fabric and Yarn Dyeing *(3 units lecture / lab)* A serious investigation of various aspects of fabric or yarn dyeing: direct application (painting, etc.); resists (batik, gutta, tie-dye, clamp-dye, stitch dye, etc.); mordant or leaf print; dye pot yarn or fabric dyeing; painted warps or combinations of the above. After the initial investigation of a variety of processes, students will focus on one or more processes and work with them to become proficient. *Prerequisite: ART-64 May be repeated to a maximum of two enrollments. Grade Only*

Astronomy (ASTRO)

ASTRO-10 Introduction to Astronomy *(3 units lecture)* This course will present an overview of historical approaches to the understanding of the science of astronomy; study electromagnetic radiation and how astronomers use this phenomena; present an overview of the solar system and its components; study the sun as a star and other stars which are double, variable, or bizarre; describe the evolution of stars; study groupings of stars in clusters and galaxies; review the dynamics of galaxies and clusters of galaxies; and analyze the role of galaxies in the dynamics of the universe. *Grade Only CSU and UC*

ASTRO-11 The Solar System and Space Exploration *(3 units lecture)* An examination of the geologic processes that have shaped the planets and moons of our solar system. Students will explore the fundamentals of geology and meteorology of the Earth and apply them to the rest of the solar system. Critical thinking will be expressed in the context of comparative planetology. *Grade Only CSU and UC*

ASTRO-15A Observational Astronomy *(1 unit lecture / lab)* This course is designed to familiarize students with visual, telescopic and some photographic observing techniques. Both the day and evening sky may be observed. Optional late-night observing sessions may be offered. Telescopes may be checked out by students. The planetarium will be used on cloudy nights. *Prerequisite: ASTRO-10 or concurrent enrollment CR/NC only CSU and UC*

Automotive Technology (AT)

AT-12 Automotive Braking Systems *(4 units lecture / lab)* The theory and principles of modern automotive braking systems. Hydraulic principles, coefficients of friction, and thermodynamics will be discussed. Diagnosis, repair, overhaul, and adjustment procedures of drum, disc/drum, and four-wheel disc systems will be emphasized. Anti-lock Braking Systems (ABS) diagnostics, servicing, and repair procedures will also be covered. The course will cover common domestic and import vehicles and light trucks only and is designed in conjunction with the National Institute for Automotive Service Excellence (ASE) standards and subsequently, will prepare the student for the ASE Brakes Certification Examination. *Grade Only CSU*

AT-14 Manual Transmission/Transaxle and Drivetrain *(4 units lecture / lab)* Theory and principles of manual transmissions/transaxles, clutches, drive shafts, half shafts, variable and constant velocity joints, differentials, rear wheel drive axle assemblies, all wheel drive, and four wheel drives. Gear types, ratios, compound ratios, and current noise, vibration, and harshness diagnostic routines will be discussed. Diagnosis, repair, overhaul, and adjustment procedures for common domestic, import, and light truck drive train components will be emphasized. The course is designed in conjunction with National Institute for Automotive Service Excellence (ASE) standards and subsequently will prepare the student for the ASE Manual Transmission/Transaxle & Drive Train Certification Examination. *Grade Only CSU*

AT-16 Automotive Electrical Systems *(4 units lecture / lab)* A study of basic atomic theory, Ohm's Law, series and parallel circuits, electrical symbols and schematics, automotive batteries, charging systems, voltage regulation, starting systems, lighting systems, and various accessories. The course will focus on the theory and principles of modern automotive electrical systems. The laboratory portion of the course will place emphasis on diagnosis and testing techniques required to effectively determine the necessary action in an electrical system failure. The use of schematics, technical specifications, voltmeters, ohmmeters, ammeters, and circuit testers will be required. The course is designed in conjunction with National Service Excellence (ASE) standards and subsequently will, in part, prepare the student for the ASE Electrical/ Electronic Certification Examination. *Recommended preparation: IT-161 or equivalent Grade Only CSU*

AT-18 Automotive Engine Repair *(4 units lecture / lab)* An introduction to four stroke cycle theory, engine torque, horsepower, materials, and manufacturing processes as they relate to internal combustion power plants used in production automobiles and light trucks. The theory, principles, and diagnosis of cooling systems and lubrication systems will be emphasized. The laboratory portion of the course will focus on comprehensive engine testing, engine disassembly, precision measuring, and inspection of internal engine components. Proper techniques for reconditioning of the cylinder block and crankshaft will be discussed only. Machining processes for reconditioning of cylinder heads will be covered. The course is designed in conjunction with National Institute for Automotive Service Excellence (ASE) standards and subsequently will prepare the student for the ASE Engine Repair Certification Examination. *Grade Only CSU*

AT-20 Automotive Suspension and Steering Systems *(4 units lecture / lab)* The theory and principles related to automotive suspension and steering systems. Topics will include tire and wheel balancing, alignment angles, steering system geometry, and active restraint systems (airbags). The laboratory portion of the course will include diagnosis, adjustment, repair, and replacement techniques for automotive and light truck suspension and steering components. Automotive alignment measuring and adjusting procedures will be

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emphasized. The course is designed in conjunction with National Institute for Automotive Service Excellence (ASE) standards and subsequently, will prepare the student for the ASE Suspension and Steering Certification Examination. *Grade Only CSU*

AT-22 Automotive Electronics *(4 units lecture / lab)* A study of semiconductor theory, transistors, diodes, capacitance, inductance, inductive reactance, the motor principle, integrated circuits, and digital logic circuits. Emphasis is placed on the theory, diagnosis, and repair of modern automotive computer systems. Topics will include body control module (BCM), power train control module (PCM), bus interface, and related components for circuits. The laboratory portion of the course will require extensive use of electronic test equipment, circuit board analysis, and diagnostic procedures common to modern automotive applications. The course is designed in conjunction with National Institute for Automotive Service Excellence (ASE) standards and subsequently will, in part, prepare the student for the ASE Electrical/Electronic Certification Examination. *Prerequisite: AT-16 Recommended preparation: IT-161 or equivalent Grade Only CSU*

AT-24 Engine Performance *(4 units lecture / lab)* The theory and principles of engine performance related topics. Topics will include the internal combustion process, compression ratios, combustion efficiency, volumetric efficiency, airflow requirements, air-fuel ratios, fuel delivery systems, carburetion, manifolding, electronic ignition systems, oscilloscope waveform interpretation, ignition timing and advance strategies, super- charging, and turbo charging. The laboratory portion of the course will focus on diagnosis and repair of engine performance problems, carburetor overhaul procedures, ignition system diagnosis, and engine mechanical related problems. The course is designed in conjunction with National Institute for Automotive Service Excellence (ASE) standards and, subsequently, will partially prepare the student for the ASE Engine Performance Certification Examination. *Recommended preparation: IT-161 or equivalent Grade Only CSU*

AT-26 Automotive Air Conditioning and Heating *(4 units lecture / lab)* Theory and operation of automotive air conditioning and refrigeration systems. Topics will include the refrigeration cycle, evacuation principles, atmospheric pressure, humidity, heat quantity, heat intensity, latent heat, heat transfer, automotive refrigerants, temperature pressure relationship, green-house gases, and proper handling and storage of refrigerants. The laboratory portion of the course will focus on the diagnosis and repair of heating and cooling systems, use of refrigerant recycling-reclaiming equipment, use of evacuation equipment, retrofitting R-12 systems to 134a, and environmentally sound refrigeration handling techniques. Extensive use of a compound gauge set for diagnosis will required. The course is designed in conjunction with National Institute for Automotive Service Excellence (ASE) standards and, subsequently, will prepare the student for the ASE Air Conditioning & Heating Certification Examination. *Grade Only CSU*

AT-28 Advanced Engine Performance *(4 units lecture / lab)* The theory and principles of advanced engine performance topics. Topics will include fuel injection systems, distributorless ignition systems, air injection systems, evaporative emission systems, exhaust gas recirculation, catalytic converters, computer controlled emission systems including OBD II compliant systems. The laboratory portion of the course will focus on diagnosis and repair of common drivability related problems. Five gas infrared exhaust analysis, scan tools, digital storage oscilloscopes, and common electronic test equipment will be used extensively in the course. The course is designed in conjunction with National Institute for Automotive Service Excellence (ASE) standards and, subsequently, will partially prepare the student for the ASE Engine Performance Certification Examination. *Prerequisite: AT-24 Recommended preparation: IT-161 or equivalent Grade Only CSU*

AT-30 Automatic Transmission/Transaxle *(4 units lecture / lab)* The theory and principles related to both hydraulic and electronically actuated automatic transmissions/ transaxles. Topics will include positive and variable displacement pumps, torque converters, torque converter clutches, hydraulic valving, electronic shift solenoids, governors, and common compound planetary gear arrangements. The laboratory portion of the course will focus on diagnostic and overhaul procedures, in-vehicle testing, and bench testing of various components. The use of common automotive electronic test equipment will be required. The course is designed in conjunction with National Institute for Automotive Service Excellence (ASE) standards and, subsequently, will prepare the student for the ASE Automatic Transmission/ Transaxle Certification Examination. *Recommended preparation: AT-16 Grade Only CSU*

AT-150 Chainsaw Use *(1.5 units lecture / lab)* A course designed to train and familiarize students with the safe use of saws in a variety of simple situations. Additionally, repairs, maintenance and sharpening will be included. Classroom instruction will be applied in the field which will provide experience necessary to working safely in a variety of forest situations. *Grade Only*

Biology (BIOL)

BIOL-1 General Biology *(3 units lecture / lab)* General Biology is an introductory course in life science, emphasizing the unifying principles of biology. Applications of biological concepts to current human issues are also considered. *Note: Required of pre-nursing majors. Not open to students who have completed or who are currently enrolled in BIOL-3. Non-science majors should see BIOL-8, 10, 15 and ENVSC-10. Grade Only CSU and UC*

BIOL-2 Microbiology *(4 units lecture / lab)* A study of the kinds of and methods of identifying microorganisms, their anatomy, physiology, genetics, and ecological importance. Emphasizes the role of microorganisms in disease and the mechanisms of host resistance to disease. Laboratory work emphasizes the importance of aseptic techniques, methods of control, procedures for isolating and culturing, and methods used in identifying microorganisms. *Prerequisite: BIOL-1 Grade Only CSU and UC (CAN BIOL14)*

BIOL-3 Fundamental Cell Biology *(4 units lecture / lab)* A study of the fundamental structure and function of cells including consideration of all eucaryotic cell organelles, reproduction, genetics, evolution, and ecology. *Prerequisite: CHEM-1A or CHEM-2 Note: This course is designed for those majoring in biological sciences or related fields. Grade Only CSU and UC (CAN BIOL2)*

BIOL-4 General Zoology *(4 units lecture / lab)* A study of function, form, embryology, ecology, and evolution of animals. *Note: This course is designed for those majoring in biological sciences or related fields. Grade Only CSU and UC (CAN BIOL4)*

BIOL-5 Introduction to Botany *(4 units lecture / lab)* A study of function, form, ecology, natural history, evolution, and other topics that relate to living plants. *Note: This course is designed for those majoring in biological sciences or related fields. Grade Only CSU and UC (CAN BIOL6)*

BIOL-6 Human Anatomy *(4 units lecture / lab)* This course provides an introduction to human anatomy. It includes the study of the gross and microscopic structure of all the organ systems of the human body with special emphasis on the relationship between structure and function. Laboratory work includes the study of human cadavers. *Recommended preparation: BIOL-1 Grade Only CSU and UC (CAN BIOL10)*

BIOL-7 Human Physiology *(4 units lecture / lab)* This course provides the student with an introduction to human physiology. Included is a study of the function of all the organ systems of the body. Special emphasis is given to the role of each system in regulating and maintaining bodily homeostasis. *Prerequisite: BIOL-1 Grade Only CSU and UC (CAN BIOL12)*

BIOL-8 Human Biology *(3 units lecture / lab)* An introduction to general biological concepts with an emphasis on humans, their evolution, and how they interact with their environment. Human anatomy, physiology, and the disease process will be discussed. This is a general education course for non-science majors. *Grade Only CSU*

BIOL-9 Plants and Civilization *(3 units lecture / lab)* An introduction to economic botany covering plants as a resource for people in food, fiber, shelter, medicine and other uses. Laboratory topics include an overview of plant biology as well as identification and uses of economically important plants on a local and global scale. *CR/NC option CSU and UC*

BIOL-10 Introduction to Biology *(3 units lecture / lab)* A course dealing with ecology and natural history, heredity and evolution and structure and function and identification of organisms. Basic biological concepts will be presented in support of these topics. *Grade Only CSU and UC*

BIOL-15 Marine Biology *(3 units lecture / lab)* Identification, natural history and ecology of local marine organisms including intertidal invertebrates, marine birds, mammals and plankton. *Note: This is a course for the non-science majors. Field trips are required. The College does not provide transportation. Grade Only CSU and UC*

BIOL-16 Birds of the North Coast *(2 units lecture / lab)* Identification, structure and ecological relationships of North Coast birds will be covered. *Note: This is a natural history course for the beginning and intermediate bird watcher. Field trips are required. The College does not provide transportation. Grade Only CSU*

BIOL-17 Wildflowers, Trees and Shrubs *(2 units lecture / lab)* Identification, structure, function, and ecological relationships of North Coast plants, trees, shrubs and wildflowers will be studied. *Note: This is a natural history course for the amateur botanist. Field trips are required. The College does not provide transportation. Grade Only CSU and UC*

BIOL-18 Natural History of N Coast Animals *(3 units lecture / lab)* An introduction to the biology and natural history of local animals with an emphasis on North Coast amphibians, reptiles, birds, mammals, and selected invertebrate groups. *Note: This is a course for the general education student with interests in biology and natural history. Field trips are included, the College does not provide transportation. Grade Only CSU*

BIOL-19 Rare Plants: Species of Special Concern *(2 units lecture)* The identification and ecology of North Coast plants of special concern as defined by the Department of Fish and Game. Key features used in identification will be covered as well as plants that are often mistaken for rare species. Habitat preference as well as other ecological features, such as reproductive ecology, will be discussed. *Recommended Preparation: BIOL-17 or 22, or FOR-51 or equivalent. CR/NC option CSU*

BIOL-20 Natural History *(3 units lecture / lab)* An introduction for non-science majors to the identification, natural history and ecological relationships of plants and animals. Techniques for sampling organisms and collecting field data *Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

BIOL-21 Mushrooms of the North Coast *(3 units lecture / lab)* Mushrooms, their identification and ecology will be the focus of this course. Emphasis is placed on keying species to genus and on field identification of the more common toxic and edible species of the North Coast. *CR/NC option CSU and UC*

BIOL-22 California Plant Identification *(3 units lecture / lab)* This is an introduction to the field of plant taxonomy. Emphasis is placed on keying species using A California Flora. Lecture material covers introductory concepts in plant taxonomy and characteristics of the common flowering plant families in California. Lab time is spent learning sight identification of families and keying out local plants. *Prerequisite: BIOL-17 Note: Field trips (the College does not provide transportation) are taken to local wildflower areas. Grade Only CSU and UC*

BIOL-23 Lichens of Northern California *(2 units lecture / lab)* A study of the common lichens of Northern California. Students will collect and identify lichens and become familiar with their morphology, classification, physiology, biochemistry, ecology, and economic uses. *CR/NC option CSU*

BIOL-24 Introduction to Marine and Anadromous Fishes *(3 units lecture / lab)* A detailed study of marine and anadromous fishes of the northern Pacific Ocean. Topics covered include identification, biology, fisheries history and management and sampling and census techniques. *Grade Only CSU*

BIOL-25 Marine and Coastal Field Biology *(3 units lecture / lab)* A field-oriented introduction to the interrelationships between marine and estuarine organisms and their environment. Emphasis in this course is placed on field methods, sampling techniques and quantitative data collection and analysis. *Grade Only CSU*

BIOL-26 Introduction to Marine Plankton *(2 units lecture / lab)* A field-oriented introduction to the interrelationships between marine and estuarine organisms and their environment. Emphasis in this course is placed on field methods, sampling techniques and quantitative data collection and analysis. *Grade Only CSU*

BIOL-35 Field Studies in Biology *(1 - 2 units lecture / lab)* A field class designed to give the student practical experience in field identification and field study of the ecology and biology of California's native species in their native habitat. This course involves an extended field trip (the College does not provide transportation) away from the campus. Units offered may vary by semester. Consult Schedule of Classes for section information. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

BIOL-120E Intertidal Ecology *(0.5 unit lecture / lab)* This course will discuss the factors and principles involved in intertidal ecosystems. Local intertidal habitats will be explored and the ecological role and adaptive morphology of intertidal organisms will be discussed. *CR/NC option*

BIOL-120H Wildflowers of the Coniferous Forests *(0.5 unit lecture / lab)* This short course introduces students to the common wildflowers and other dominant plants of the closed cone pine and redwood forests. The biology and ecology of the species and the plant communities in which they grow are discussed. *CR/NC option*

BIOL-120K Marine Mammals of the North Coast *(0.5 unit lecture / lab)* This course will focus on the evolution of mammals with particular emphasis on the adaptations of mammals to the marine environment. The identification and ecology of local marine mammal species will be discussed. *CR/NC option*

BIOL-120L Bird Migration *(0.5 unit lecture / lab)* This course will focus on the remarkable phenomenon of bird migration. Discussion topics will provide the information necessary to understand observations made in the field. *CR/NC option*

BIOL-120M Introduction to Identification of North Coast Birds *(0.5 unit lecture / lab)* This course will focus on how to look at and identify local birds and where to find them. Field observations will focus on the identification and ecology of local bird species. *CR/NC option*

BIOL-120N Mammals of Northern California *(0.5 unit lecture / lab)* This course will focus on the evolution of land mammals with particular emphasis on the variations and adaptations of different land mammals to their environment. Methods of identifying, tracking and trapping local land mammals for scientific study will be discussed. *CR/NC option*

BIOL-120O Mosses & Allies - North Coast *(0.5 unit lecture / lab)* An introduction to the identification, morphology, anatomy, and ecology of mosses, liverworts, and hornworts. *Note: One field trip is required. The College does not provide transportation. CR/NC option*

BIOL-120P Marine Algae *(0.5 unit lecture / lab)* An introduction to the identification, morphology, reproduction, and ecology of marine intertidal algae of Northern California. *CR/NC option*

Business (BUS)

BUS-1A Principles of Accounting *(4 units lecture / lab)* A study of the fundamental concepts, procedures and principles of financial accounting as applied to both service and merchandising businesses. Additional topics include: accounting systems and special journals, cash receivables, inventories, plant assets and intangible assets, current liabilities and payroll. Students will also use computerized accounting software. Designed to provide entry level employment skill as an account clerk or as a bookkeeper. *CR/NC option CSU and UC (CAN BUS2)*

BUS-1B Principles of Accounting *(4 units lecture / lab)* A continuation of BUS-1A with emphasis on managerial accounting. The special accounting issues related to partnerships and corporations are covered as are statements of cash flows and methods to analyze financial statements. Control accounting includes: cost systems, budgetary control and standard cost systems. Managerial decision making considers cost, revenue concepts and preparation of reports and special analysis. *Prerequisite: BUS-1A Grade Only CSU and UC (CAN BUS4)*

BUS-2 Automated Accounting *(1 unit lecture / lab)* An introduction to the concepts, procedures and language of automated accounting systems for students that are familiar with manual accounting procedures. A hands-on approach to learning how computerized integrated accounting systems function is provided. *Prerequisite: BUS-1A CR/NC only CSU*

BUS-4 Computerized Bookkeeping *(3 units lecture / lab)* A focus on learning the basics of entering transactions and generating reports. This course provides an understanding of the most commonly used microcomputer-based bookkeeping software package for business today. The entire accounting cycle will be covered, including setting up a new company and using advanced features of the software. *Prerequisite: BUS-180 or equivalent Grade Only CSU*

BUS-5 Business Document Transcription *(0.5 unit lab)* Practice in the use of transcribing machines and word processing programs, as well as proofreading and editing. Students will transcribe a variety of business documents and communications such as letters, memos, and meeting minutes from cassette tapes. *Recommended preparation: CIS-1 or BUS-11 or equivalent Note: Students should be able to keyboard at a minimum of 30 WPM on a computer. CR/NC option CSU*

BUS-6 Legal Keyboarding *(1 unit lab)* Practice in keyboarding forms used in California legal offices emphasizing understanding and completion of standard forms, pleadings, documents, and correspondence. Students should be able to keyboard at a minimum of 40 WPM on a computer, edit documents, and correctly format corres-pondence. *Grade Only CSU*

BUS-7 Legal Document Transcription *(0.5 unit lab)* Practice in the use of transcribing machines and word processing programs. Students will transcribe a variety of legal pleadings, contracts, and minutes from cassette tapes. *Recommended preparation: CIS-1 and BUS-11 or equivalent Note: Students should be able to keyboard at a minimum of 30 WPM on a computer. CR/NC option CSU*

BUS-8 Document Formatting *(3 units lecture / lab)* A course to review correct keyboarding techniques and develop formatting skills. Students format business letters, interoffice memorandums, tables and reports. Keyboarding on microcomputers or electronic typewriters, they input information from straight copy, handwritten copy and rough draft copy. *Prerequisite: BUS-11 Grade Only CSU*

BUS-8L Letter Formatting *(1 unit lab)* An intensive study of business letters including business letter styles, punctuation styles and placement of business letter parts. Hands-on development producing business letters and interoffice memos on both an electric memory typewriter and a computer using WordPerfect. *Prerequisite: BUS-11 or BUS-114 Note: Students who have taken BUS-8L, 8R, or 8T may not also receive credit for BUS-8. Grade Only CSU*

BUS-8R Report Formatting *(1 unit lab)* An intensive study of reports and manuscripts including different formats, title page, bibliographies, footnotes and outlines. Hands-on skill development producing reports and manuscripts on both an electric memory typewriter and a computer using WordPerfect. *Prerequisite: BUS-11 or BUS-114 Note: Students who have taken BUS-8L, 8R, or 8T may not also receive credit for BUS-8. Grade Only CSU*

BUS-8T Table and Form Formatting *(1 unit lab)* An intensive study of centering and arranging columnar material and producing original forms. Also includes preparation of common office forms such as invoices, purchase orders and statements of account. Hands-on skill development producing tables and forms on both an electronic memory typewriter and a computer using WordPerfect. *Prerequisite: BUS-11 or BUS-114 Note: Students who have taken BUS-8L, 8R, or 8T may not also receive credit for BUS-8. Grade Only CSU*

BUS-10 Introduction to Business *(3 units lecture)* A survey course of business in our economy, including forms of business organization, marketing, finance, personnel, production, accounting, advertising, electronic data processing, consumer relations, government and business and corporate management. It is designed to expose all students to the many facets of business life both as consumers as well as potential business workers and/or entrepreneurs. In order to achieve understanding of our free enterprise system, comparisons are drawn between it and other economic systems used in other societies. *Grade Only CSU and UC*

BUS-11 Keyboarding and Typing *(3 units lecture / lab)* This course is designed to train the student to develop basic skills in touch keyboarding and typing and formatting. Emphasis is on inputting alphabetic, numeric and symbol information and in formatting correspondence, tables and reports. Students will keyboard assignments on micro-computers and electronic typewriters. *CR/NC option CSU*

BUS-12 Keyboarding and Typing Skill Development *(1 unit lab)* This course is a self-paced keyboarding and typewriting course for building speed and or accuracy through specialized drills on microcomputers and electronic typewriters. *Prerequisite: BUS-11 or BUS-114 May be repeated to a maximum of four enrollments. CR/NC only CSU*

BUS-14M Advanced Keyboarding - Medical *(1 unit lab)* Students will type and word process medical forms and records used in hospitals and medical offices. The course consists of practice preparing health insurance claim forms, hospital discharge forms, patient billing forms, patient files, doctors' dictation and medical reports; as well as scheduling appointments and using pegboard accounting techniques. *Prerequisite: BUS-162, BUS-8L, BUS-8R, BUS-8T, or BUS-8 Grade Only CSU*

BUS-16 Word Processing I *(3 units lecture)* Introduction to word processing including creating, editing, storage, retrieval, document formatting, spelling and grammar tools, headers and footers, pagination, sorting and printing; emphasis on correct business formatting of letters, memos, and short reports using a popular word processing software package. *Corequisite: BUS-16L Note: For optimum results, students should have the ability to keyboard by touch method. Various software packages may be used; consult Schedule of Classes for current topic. CR/NC option CSU*

BUS-16L Word Processing I - Lab *(1 unit lab)* Introduction to word processing lab including hands-on creating, editing, storage, retrieval, document formatting, spelling and grammar tools, headers and footers, pagination, sorting, and printing. Exercises emphasize correct business formatting of letters, memos, and short reports using a popular word processing software package. *Corequisite: BUS-16 Note: For optimum results, students should have the ability to keyboard by touch method. Various software packages may be used. CR/NC only CSU*

BUS-17 Word Processing II *(3 units lecture)* Advanced word processing including tables, columns, page and section breaks, graphics, sorting, styles, templates, wizards, page numbers, headers, footers, footnotes, endnotes, merging, macros and development of speed and accuracy levels necessary for word processing performance. Students will use a popular word processing software package for document production and advanced formatting of letters, memos, tables, and reports. *Corequisite: BUS-17L Note: Understanding of basic word processing is assumed. For optimum results, students should have the ability to key- board by touch method. Various software packages may be used. Grade Only CSU*

BUS-17L Word Processing II - Lab *(1 unit lab)* Advanced word processing lab including tables, columns, page and section breaks, graphics, sorting, styles, templates, wizards, page numbers, headers, footers, footnotes, endnotes, merging, and macros. Students will use a popular word processing software package for document production and correct business formatting of letters, memos, tables, and reports. *Corequisite: BUS-17 Note: Understanding of basic word processing is assumed. For optimum results, students should have the ability to keyboard by touch method. Various software packages may be used. CR/NC only CSU*

BUS-18 Business Law *(3 units lecture)* A survey of law and its enforcement in relationship to business activities as well as the legal relationships between business and society. Subject matter includes social forces, constitutional law, government regulations, international legal environment, administrative agencies, environmental law and community plan-ning, consumer protection, crimes, torts, contracts, personal property and bailments, sales contracts, commercial paper, agency and employment. *Grade Only CSU and UC (CAN BUS12)*

BUS-25 Introduction to Basic Word Processing *(0.5 unit lab)* A short-term introductory course in word processing using the most recent software. Students create, save and retrieve documents. They also enhance printing features, manipulate the spell check and thesaurus features, and change default tab settings to various justifications. *Recommended preparation: touch keyboarding/25 WPM minimum May be repeated to a maximum of four enrollments. CR/NC option CSU*

BUS-27 Beyond Basic Word Processing *(0.5 unit lab)* A short-term intermediate course in word processing using the most current software. Students create headers, footers, alternating page numberings, superscripts, subscripts, line drawing organizational charts and tables with various row and cell combinations. They also perform global search and replace. *Recommended preparation: touch keyboarding/25 WPM minimum May be repeated to a maximum of four enrollments. Grade Only CSU*

BUS-33 International Business *(3 units lecture)* An introductory course to acquaint students with international commerce and worldwide business activities. Emphasis is placed on different business practices, economic development, cultural differences which affect business, political environments, currency exchange and market analysis for international business activities. *Grade Only CSU*

BUS-35 Marketing *(3 units lecture)* This course will study the marketing process including analysis of market potential, product development, pricing strategy, distribution systems, advertising and personal selling. Emphasis is placed on understanding the consumer and satisfaction of consumer wants. *Grade Only CSU*

BUS-52 Business Communications *(3 units lecture)* This course will apply written and oral communications to the business environment. Written communications will focus on the composition of effective business letters, memorandums and short reports. Oral communications will include small group participation and informative oral reports. In addition, students will become familiar with electronic mail, telecommunications, and networking. *Recommended preparation: BUS-152 or ENGL-150 Grade Only CSU*

BUS-53 Managing Office Information Systems *(3 units lecture)* Advanced preparation for students' transition from the classroom to the work force environment. Students integrate technological knowledge and skills from previous courses with new information about (1) communicating in the work-place, (2) teambuilding, (3) problem solving, (4) organization and time management, (5) career planning. Exercises include software installation, e-mail management, scheduling software, project management software, budget management software, budget management, and other computer-related tasks technical office workers will encounter in the workplace. Includes review of editing and proof-reading principles for computer users. Exercises will include independently analyzing and evaluating a filing system and provide practical solutions to various filing problems. *Corequisite: BUS-53L Grade Only CSU*

BUS-53L Managing Office Information Systems - Lab *(1 unit lab)* Hands-on approach to students' transition from the classroom to the work force environment. Students will integrate technological knowledge and skills from previous courses with new information about (1) communicating in the workplace, (2) teambuilding, (3) problem solving, and (4) organization and time management. Exercises include software installation, e-mail management, scheduling and project management software, budget management, and other computer-related tasks. Exercises will include applying proper quality assurance to all projects, setting up filing systems, and the use of a popular scheduling program. *Corequisite: BUS-53 CR/NC only CSU*

BUS-56 Document Processing *(3 units lecture / lab)* In-depth training for students already familiar with the use of an integrated computer software package (Microsoft Office). Students complete spreadsheet, database, presentation and word processing exercises. *Grade Only CSU*

BUS-63 Desktop Publishing Applications *(3 units lecture)* An introduction to developing camera ready documents which contain both graphics and text. Students will design documents which combine text and graphics on a printed page using a professional quality desktop publisher. Graphics will be created using a scanner and professional quality draw and paint packages. *Corequisite: BUS-63L Grade Only CSU*

BUS-63L Desktop Publishing Applications - Lab *(1 unit lab)* An activity course enabling students to develop assignments presented in BUS-63. Students will receive one-on-one and small group instruction in the use of desktop publishing software and hardware. *Corequisite: BUS-63 CR/NC only CSU*

BUS-64 Advertising *(3 units lecture)* A study of the fundamentals and techniques of advertising. Emphasis is placed on target market analysis, planning and creating advertisements, media strategy, and placement. Other topics include the development and projection of store image, study of ethical issues, and the relationship of advertising to society. *Grade Only CSU*

BUS-65 Introduction to E-Commerce *(3 units lecture)* An introduction to strategies for setting up and conducting business through the Internet and World Wide Web. This will include marketing strategies, targeting the customer, product promotion, inventory management, online security, and appro-priate utilization of e-commerce based on company size. Current software and hardware options will be explored. A basic knowledge of business principles and use of the Internet is assumed. *Corequisite: BUS-65L Recommended preparation: BUS-10 and CIS-83 or equivalent Grade Only CSU*

BUS-65L Introduction to E-Commerce - Lab *(1 unit lab)* Hands-on experience in developing assignments given in BUS-65. Students will receive one-on-one and small group instruction in using the Internet and setting up an electronic storefront. Current software and hardware options will be explored. *Corequisite: BUS-65 Recommended preparation: BUS-10 and CIS-83 or equivalent CR/NC only CSU*

BUS-68 Introduction to Principles of Management *(3 units lecture)* This course is a practical introduction to the skills, concepts and attitudes of successful management. Primary management functions such as planning, organizing, leading and controlling, as well as related skills which include social and ethical responsibilities, discipline and performance evaluation, motivation and communication techniques of managers, are areas of emphasis. *Grade Only CSU*

BUS-69 Small Business Entrepreneurship *(3 units lecture)* A study of small business and its role in society. The course focuses on procedures and techniques for starting and managing a small business. Topics to be covered include financing, promotion, human relations, legal issues, production, and problem solving. *Grade Only CSU*

BUS-81A Individual Income Tax Law *(4 units lecture / lab)* An introduction to the Internal Revenue Code with emphasis on income tax preparation for individuals. Working with tax law, income determination, deductions, property transactions, capital gains and losses, and tax determination are covered. *Grade Only CSU*

BUS-81B Corporate and Partnership Income Tax Law *(4 units lecture / lab)* An introduction to the Internal Revenue Code with emphasis on income tax preparation for corporations and individuals. Working with tax law income determination, deductions, property transactions, capital gains and losses, and tax determination are covered. *Prerequisite: BUS-81A Grade Only CSU*

BUS-82 Current Income Tax Preparation *(1.5 units lecture)* Students will learn how to prepare basic IRS and California State income tax forms for students and others in the community with low to limited income, individuals with disabilities, non-English speaking and elderly taxpayers. *May be repeated to a maximum of two enrollments. Grade Only CSU*

BUS-94 Business Mathematics *(3 units lecture)* A review of basic mathematical processes and their application to problems concerning bank records, merchandise inventory and turnover, percentage, cash and trade discounts, markup, depreciation, interest, promissory notes, bank discount, and payroll. It will cover all the mathematical concepts and procedures that will be required in the Principles of Accounting classes (BUS-1A/1B). *Prerequisite: MATH-105/106 Grade Only CSU*

BUS-111 Office Communications Skills - Career Success *(1 unit lecture)* An introduction to developing communication and interpersonal skills necessary to secure and maintain a job, and be successful in the work force environment. Students will build a firm foundation in human relations and interpersonal skills. Students apply an understanding of effective listening and verbal communication, customer service, teamwork, and conflict resolution through hands-on activities. Students will also build personal qualities of responsibility, self-esteem, sociability, self-management, and integrity. *CR/NC option*

BUS-113 Managing - Office Environment *(1 unit lecture)* Practical introduction to the concepts and skills of managing office environments. The student will develop understandings in office ergonomics, design, and health and safety issues. The student will also develop understandings in managing office documents and handling office mail. Computer systems, telephone systems, and other automated office equipment usage will also be covered. *CR/NC option*

BUS-114 Microcomputer Keyboarding *(1.5 units lecture / lab)* This course is designed for those who plan to use keyboarding skills for personal and secondary vocational purposes or for entry into computer and word processing classes. Students will learn the alphabetic, numeric and symbol keys including the 10-key pad on the microcomputer. *CR/NC option*

BUS-115 Programmed Word Processing: WordPerfect *(1 unit lab)* This is a beginning level course designed for those who have developed basic touch keyboarding and typing skills and who wish to learn word processing using WordPerfect software in an individualized laboratory setting. *Prerequisite: BUS-114 Grade Only*

BUS-119T Legal Terminology *(2 units lecture)* A concentrated study of legal words and terms including definitions, spelling, pronunciation and application with an emphasis on word construction to enable the student to recognize and comprehend the meaning of related terms — particularly Latin terms. *Grade Only*

BUS-119V Business Word Building *(2 units lecture)* A concentrated study of the meaning and spelling of word prefixes, suffixes and roots, homonyms, words often confused, spelling rules, spelling demons, plurals, possessives, compound words, hyphenation, word division, vocabulary enrichment and effective use of the dictionary. *Grade Only*

BUS-121 Probate Documents *(0.5 unit lecture / lab)* A study of typical California specific probate forms and pleadings prepared by legal secretaries. Students learn to calendar deadlines, prepare documents, create pleading templates, and process information for probate administrative purposes. *Recommended preparation: BUS-156, BUS-11 and CIS-1/1L Grade Only*

BUS-122 Family Law Documents *(0.5 unit lecture / lab)* A study of typical California specific family law forms and pleadings prepared by legal secretaries. Students learn to calendar deadlines, prepare documents, create pleading templates, and process information used for family law purposes. *Recommended preparation: BUS-165, BUS-11 and CIS-1/1L Grade Only*

BUS-123 Civil Procedure Documents *(0.5 unit lecture / lab)* A study of typical California specific probate forms and pleadings prepared by legal secretaries. Students learn to calendar deadlines, prepare documents, create pleading templates, and process information used for civil procedure purposes. *Recommended preparation: BUS-156, BUS-11 and CIS-1/1L Grade Only*

BUS-125 Unlawful Detainer Documents *(0.5 unit lecture / lab)* A study of typical California specific unlawful detainer forms prepared by legal secretaries. Students learn to calendar deadlines, prepare documents, and process legal information. *Recommended preparation: BUS-156, BUS-11 and CIS-1/1L Grade Only*

BUS-150B Business Vocabulary *(1 - 2 units lab)* A vocabulary building course with an emphasis on the study of Latin, Greek and name derivatives; misused and confused words; descriptive and action words; rhetoric and figures of speech; and general and specialized vocabulary. Units vary by semester consult Schedule of Classes for section information. *May be repeated to a maximum of two enrollments. Grade Only*

BUS-150M Medical Vocabulary *(1 unit lab)* An introduction to medical terminology. A basic medical vocabulary will be acquired by learning a word-building system of roots, suffixes, prefixes, and combining forms. *Grade Only*

BUS-150S Spelling *(1 unit lab)* A study of commonly misspelled words to help students master the basic rules of spelling. *Grade Only*

BUS-152 Business English *(3 units lecture)* A course in business composition and English fundamentals applicable to the business environment. Punctuation, spelling, grammar, sentence structure, revising techniques and expository and argumentative business writing are included. In addition, students will learn a word processing software program while they compose and edit their composition. *Prerequisite: ENGL-350 (or equivalent) with a "C" grade or better or assessment recommendation for ENGL-150 or 1A Grade Only*

BUS-156 Legal Office Procedures *(5 units lecture / lab)* A presentation of the requirements and duties of a legal secretary, legal procedures, court structures, preparation of legal documents, civil litigation, family law, wills and trusts, probate, business entities, real estate, unlawful detainer, and criminal law. This course will be taught through a combination of lecture and lab. During lectures, case scenarios will be presented and discussed. During lab time, students will prepare legal documents pertaining to the case scenarios through the use of word processing and legal documents pertaining to the case scenarios through the use of word processing and legal document programs. *Grade Only*

BUS-158 Intensive Filing Practice *(1 unit lab)* This course is designed to provide intensive instruction in alphabetic, geographic, subject and numeric systems of filing. *Grade Only*

BUS-162 Programmed Machine Transcription *(1 unit lab)* A course in efficient operation of transcription and dictation equipment and transcription techniques. Students learn to transcribe correspondence and other business documents in good form and to compose and dictate short documents. Also includes instruction in punctuation and capitalization and spelling, vocabulary and proofreading practice. *Prerequisite: BUS-8L, 8R, 8T Grade Only*

BUS-166 Editing Skills - Computer Applications *(1 unit lab)* A review of business style editing principles. While keyboarding on personal computers, students edit homonyms, word usage, grammatical agreement and punctuation choices. In addition, they discover the constructive usage of the Thesaurus and the limitations of the Spellcheck applications. Students must have the ability to keyboard by touch method. *Grade Only*

BUS-168 Business Document Preparation - Editing *(1 unit lecture)* A review of business style editing principles. While keyboarding on personal computers, students edit homonyms, word usage, grammatical agreement, and punctuation choices. Students must have the ability to keyboard by touch method. *Recommended preparation: BUS-152 or ENGL-150 Grade Only CSU*

BUS-169 Business Document Preparation - Proofreading *(1 unit lecture)* A study designed to develop proof-reading skills in the area of spelling, word division, format, capitalization, punctuation, word usage, and grammar on a variety of documents. *Recommended preparation: BUS-152 or ENGL-150 Grade Only*

BUS-180 Basic Bookkeeping *(3 units lecture / lab)* Emphasizes the record keeping process of bookkeeping and posting of business transactions, financial reports and payroll for small businesses and professionals. Introduces other bookkeeping systems, the one-write system and computer-based systems. *CR/NC option*

BUS-192 Electronic Calculators *(1 unit lab)* Training in the touch method of operating electronic display and printing calculators. Students will learn to operate the ten-key keyboard by touch and be able to utilize the common calculator features to quickly solve typical business problems. Business and consumer applications include payrolls, purchase orders, invoices, checking accounts, pricing, installment buying, proration, statement analysis, true annual interest rate and measurement. *CR/NC only*

Chemistry (CHEM)

CHEM-1A General Chemistry *(5 units lecture / lab)* The principles of chemistry for students in science, engineering, medical and related professions are covered. Atomic structure, chemical bonding, stoichiometry, the periodic table, enthalpy, solutions, and nuclear chemistry will be studied. Laboratory assignments include safety rules and procedures and the study of physical and chemical properties. *Prerequisite: CHEM-100 or high school chemistry and MATH-120 Note: Intended primarily for science majors. Grade Only CSU and UC (CAN CHEM2)*

CHEM-1B General Chemistry *(5 units lecture / lab)* This course is a continuation of CHEM-1A. Intermolecular forces, solutions, kinetics, equilibria, acids and bases, reactions, thermodynamics, oxidation-reduction and the chemistry of elements and compounds will be studied. *Prerequisite: CHEM-1A Grade Only CSU and UC (CAN CHEM4)*

CHEM-2 Introduction to Chemistry *(5 units lecture / lab)* An introduction to basic chemical principles. This fundamental approach serves as a beginning course for allied science fields. *Prerequisite: MATH-105/106 CR/NC option CSU and UC (CAN CHEM6)*

CHEM-3 Introduction to Organic Chemistry *(4 units lecture / lab)* A course in basic organic chemistry for allied science majors. This is an introductory survey of organic compounds and reactions. *Prerequisite: CHEM-2 Grade Only CSU and UC (CAN CHEM8)*

CHEM-8 Organic Chemistry *(5 units lecture / lab)* A survey of important classes of organic compounds with emphasis on materials of interest to students of the biological sciences, pre-professional programs and related areas. The laboratory work introduces the fundamental techniques using both macro and micro scale equipment for the purification, synthesis and identification of organic compounds, while illustrating the basic chemistry of the functional groups. *Prerequisite: CHEM-1A Grade Only CSU and UC*

CHEM-100 Preparation for General Chemistry *(4 units lecture)* A brief introduction to the principles of chemistry and the application of mathematics to chemistry. CHEM-100 is intended to prepare students for General Chemistry (CHEM-1A) who did not take high school chemistry or whose prior chemistry is outdated. *Prerequisite: MATH-105 or MATH-106 CR/NC option*

CHEM-152 Chemistry Tutorial Lab *(0.5 - 1 unit lab)* Individualized practice and/or review skills necessary for success in a CHEM class. *May be repeated to a maximum of four enrollments. CR/NC option*

Cinema (CINE)

CINE-1 Cinema History - Origins Through the Coming of Sound *(3 units lecture)* An introduction to the study of film history from cinema's origins in the 1890s through the widespread transition to sound-on-film technology. Students will consider the historical, production, distribution, exhibition, cultural, and aesthetic contexts of varying cinematic movements from several different parts of the world. he bulk of this course centers on silent cinema, with attention paid at the end of the course to the development of sound. *Recommended preparation: ENGL-150/150L Grade Only CSU and UC*

CINE-2 Cinema History - Coming of Sound to the Present *(3 units lecture)* An introduction to the study of film history from just after the coming of sound to the present. Students will consider the historical, production, distribution, exhibition, cultural, and aesthetic contexts of varying cinematic movements from several different parts of the world. The bulk of this course centers on post-WWII cinema in the United States and Western Europe. *Recommended preparation: ENGL-150/150L Grade Only CSU and UC*

CINE-5 Foreign Film Study *(3 units lecture)* In this course, students will view silent and sound era films from other countries. Through these films, the historical development of film as an art form and propaganda tool will be studied along with a basic cinematic vocabulary. *Grade Only CSU and UC*

CINE-6 Selected Film Authors *(3 units lecture)* A focused study on the career and body of work of a selected film author (director). The course will examine the historical, social, and film industry environment in which the director worked, and will identify recurring themes, motifs, techniques, and aesthetic choices that define that particular director's artistic style. (Featured director may vary from one semester to the next.) *May be repeated to a maximum of three enrollments. CR/NC option CSU and UC*

CINE-8 Screenwriting *(3 units lecture)* An examination of dramatic structure as defined by Aristotle, practiced by Shakespeare, and applied in the modern screenplay. The course will study two films in their screenplay and finished film forms, focusing on the writers' techniques. Students will practice dramatization and visualization techniques via writing assignments, and each will complete the first act of an original screenplay. *Recommended Preparation: ENGL 1A CR/NC option CSU*

CINE-10 History of Cinema Comedy *(3 units lecture)* Study of the history of comedy 1893 to present. Lectures, films, film clips and readings will explore the impact of the early film comedians: Chaplin, Keaton, Langdon, Lloyd, and Laurel and Hardy to the modern generation of Lewis, Sellars, Murray, Williams and Candy. *Grade Only CSU and UC*

Computer and Electronics Technology (CET)

CET-10 Survey of Electronics *(3 units lecture)* An overview of the scientific method as applied to the field of electronics, including the principles and laws of physics, chemistry and mathematical analysis to basic electronics. Direct current and alternating current components and circuits, semiconductor devices and circuits and their applications in areas such as electrical power generation and distribution, electronic communications, medical electronics, industrial electronics, and computers will be covered. Throughout the course, the scientific, historical, political and socioeconomic aspects of electronic technology will be examined. *CR/NC option CSU*

CET-10L Survey of Electronics - Lab *(1 unit lab)* A laboratory course designed to familiarize the student with the field of electrical/electronics devices, circuits, systems and test equipment through experimental measurement, data collection and mathematical analysis and evaluation. Laboratory exercises will include wiring and soldering, with an explanation of the chemistry and metallurgy of the wiring/soldering process. Modern techniques such as thin- and thick-film circuits, printed circuits, integrated circuits, and surface-mount circuits will be examined. Test equipment, such as multimeters, digital multimeters, power supplies, signal generators, network and logic analyzers, and oscilloscopes will be used to evaluate components, circuits, and systems for proper operation. Sources of circuit and measurement errors will be evaluated and compared to theoretical values to determine if devices, circuits and systems are operating within specified limits. *Corequisite: CET-10 CR/NC option CSU*

CET-41 Electronic Fundamentals I *(3 units lecture)* Introduction to semiconductor devices, circuits, power supplies, transistor fundamentals and circuits, special semiconductor devices, small- and large-signal amplifiers, and basic operational amplifiers. *Prerequisite: CET-10 Grade Only CSU*

CET-41L Electronic Fundamentals I - Lab *(1 unit lab)* Introduction to electronic laboratory test equipment such as signal generators, oscilloscopes, miltimeters, digital multimeters, distortion analyzers, and computer software to evaluate performance of devices and circuits covered in CET-41. *Corequisite: CET-41 Grade Only CSU*

CET-42 Electronic Fundamentals II *(3 units lecture)* A study of operational amplifiers, including summing circuits, integrators, differentiators, active filters, phase-locked loops, non- linear signal processing, voltage and current regulators, oscillators and function generators, audio amplifiers, switching power supplies, digital-to-analog converters, and analog-to-digital converters. *Recommended preparation: CET-41 Grade Only CSU*

CET-42L Electronic Fundamentals II - Lab *(1 unit lab)* Laboratory analysis of operational amplifiers, including summing circuits, integrators, differentiators, active filters, phase-locked loops, non- linear signal processing, voltage and current regulators, oscillators and function generators, audio amplifiers, switching power supplies, digital-to-analog converters, and analog-to-digital converters. *Corequisite: CET-42 Grade Only CSU*

CET-43 Digital and Microprocessor Fundamentals *(3 units lecture)* Basic theory of digital and microprocessor fundamentals. Topics will include number systems, codes, logic gates, Boolean algebra, combination logic, functional logic, flip-flops, counters and registers, memory, programmable logic devices, and microprocessor architecture. *Prerequisite: CET-10 Grade Only CSU*

CET-43L Digital and Microprocessor Fundamentals - Lab *(1 unit lab)* Laboratory analysis of digital and microprocessor electronics. Test equipment such as oscilloscopes, digital oscilloscopes, logic probes, pulsers, current tracers, and logic analyzers will be used to evaluate the performance of digital and microprocessor circuits. computer-aided software will be used to analyze the performance of circuits. *Corequisite: CET-43 Grade Only CSU*

CET-44 Microcomputer Fundamentals *(3 units lecture)* Introduction to technical aspects of microcomputer electronics. Topics will include 6800, 8086/8088, 80286-based processors, peripheral chips and PC systems. *Prerequisite: CET-43 Grade Only CSU*

CET-44L Microcomputer Fundamentals - Lab *(1 unit lab)* Laboratory analysis of microcomputer electronics. Topics will include 6800, 8086/8088, 80286-based processors, peripheral chips, and PC systems. Analog and digital oscilloscopes, logic analyzers and diagnostic hardware and software will be used to analyze compo-nents and systems. *Corequisite: CET-44 Grade Only CSU*

CET-45 Current Microcomputer Technologies *(1 unit lecture)* An introduction to the latest micro- computer technologies. Topics will include the following: 80386, 80486, Pentium, Macintosh, and Power PC microprocessors and associated microcomputers. *Recommended preparation: CET-44 Grade Only CSU*

CET-45L Current Microcomputer Technologies - Lab *(0.5 unit lab)* A laboratory course covering the latest microcomputer technologies. Topics will include the following: 80386, 80486, Pentium, Macintosh, and Power PC microprocessors and associated microcomputers. Performance tests, including software and hardware-based diagnostics, will be performed on the devices/systems covered in the class. *Corequisite: CET-45 Recommended preparation: CET-44L Grade Only CSU*

CET-46 Microcomputer Interfacing *(1.5 units lecture)* Study of microcomputer interfacing. Circuits and devices will include serial, parallel, GPIB/IEEE-488, VXI, and S-100 input/output systems. *Recommended preparation: CET-44 Grade Only CSU*

CET-46L Microcomputer Interfacing - Lab *(0.5 unit lab)* Laboratory course with and emphasis on microcomputer interfacing. Circuits and devices will include serial, parallel, GPIB/IEEE-488, VXI, and S-100 input/output systems. *Corequisite: CET-46 Recommended preparation: CET-44L Grade Only CSU*

CET-47 Microcomputer Peripheral Devices *(1.5 units lecture)* A study of microcomputer peripheral devices such as hard and floppy drives, monitors, printers, modems, faxes, analog-to-digital, digital- to-analog converters. *Recommended preparation: CET-44 Grade Only CSU*

CET-47L Microcomputer Peripheral Devices - Lab *(0.5 unit lab)* Laboratory analysis of microcomputer peripheral devices such as hard and floppy drives, monitors, printers, modems, faxes, analog-to-digital, and digital-to-analog converters. *Corequisite: CET-47 Recommended preparation: CET-44L Grade Only CSU*

CET-48 Microcomputer Networking *(1 unit lecture)* A study of hardware aspects of microcomputer networking. Network topologies and operating systems such as Novell, Lantastic and Windows for Workgroups will be evaluated and compared. Various cabling systems will be evaluated. *Recommended preparation: CET-44 Grade Only CSU*

CET-48L Microcomputer Networking - Lab *(0.5 unit lab)* A laboratory course dealing with the hardware aspects of microcomputer networking. Network topologies and operating systems such as Novell, Lantastic and Windows for Workgroups will be evaluated and compared. Various cabling systems will be evaluated. Students will install a Novell network. *Corequisite: CET-48 Recommended preparation: CET-44L Grade Only CSU*

CET-149 Electronics Project Construction *(2 units lecture / lab)* Selection, layout and construction of an assigned project in consultation with the CET staff. The student will use word processor, computer- aided drafting, small hand and power tools, and industry standard wiring and soldering practices to build, test and document an electronic project. The level of difficulty of the chosen project will be commensurate with the student's ability and experience. *Recommended preparation: CET-10 and CET-10L Note: Student must provide a basic tool set. CR/NC option*

CET-170 Industrial Electronics *(3 units lecture / lab)* A study of basic industrial electrical and electronic devices and circuits used in the generation, distribution, and control of electrical energy found in various manufacturing processes. Fundamental concepts of Programmable Logic Controllers (PLCs) will be covered. Laboratory exercises will use training aids and actual industrial type equipment. *Recommended preparation: CET-10 and CET-10L Grade Only*

Computer Information Systems (CIS)

CIS-1 Computer Literacy *(2 units lecture)* Focusing on the personal computer and its applications, this course provides an introduction to the fundamentals of computer literacy: operations, terminology and applications. *Corequisite: CIS-1L CR/NC option CSU and UC*

CIS-1L Computer Literacy Lab *(1 unit lab)* This is an activity course which enables students to become proficient in using the Internet and application packages in word processing, presentation graphics, spreadsheets, and data base. *Corequisite: CIS-1 CR/NC only CSU and UC*

CIS-2 Beyond Computer Literacy *(3 units lecture)* Study of using computer hardware and software technologies to research and report information. Students will research projects through the use of the Internet and other literary resources. Students will learn to use problem solving skills to plan, develop, and present projects using word processing, spreadsheets, database management systems, and presentation graphics. Topics will include computer software, hardware and terminology; use of computers as a tool in work, everyday life, and school; computer ethics; and the societal impact of computers. All communications, including homework, will be done through electronic methods. *Prerequisite: CIS-1/1L or equivalent Corequisite: CIS-2L Grade Only CSU and UC*

CIS-2L Beyond Computer Literacy Lab *(1 unit lab)* A hands-on study that uses hardware and software in a lab environment to develop and apply problem solving skills through the use of computer technologies. Students will use the lab to research projects through the use of the Internet; and plan, develop, and prepare the presentation of project material using word processing, spreadsheets, database management systems, and presentation graphics. *Prerequisite: CIS-1/1L or equivalent Corequisite: CIS-2 CR/NC only CSU and UC*

CIS-3 Problem Solving for Applications *(3 units lecture)* A course which with provide the fundamentals of computer-based solutions for use with microcomputer productivity packages including word processing, spreadsheet and data management software. *Grade Only CSU*

CIS-11 Introduction to CIS *(3 units lecture)* An introduction to computers and data processing. Includes computer terminology, computer architecture, number systems, data representation, I and I/O, operating systems and language formalities. *Recommended preparation: CIS-1 or equivalent and MATH-376 Grade Only CSU and UC*

CIS-12 Problem Solving for CIS *(3 units lecture)* This course will provide the student with language independent fundamentals of structures, computer-based solutions. Material on elementary data structures and mathematical expressions precedes an in-depth presentation of problem solving techniques including hierarchy charts, IPO charts and pseudocode. *Recommended preparation: CIS-1 or equivalent and MATH-376 Grade Only CSU and UC*

CIS-16 Object Oriented Programming With C++ *(3 units lecture)* Instruction in the steps necessary to develop application programs in C++. Included are concepts in C++, object-oriented programming, data types, functions, data flow control, arrays, pointers, and file I/O. *Corequisite: CIS-16L Recommended preparation: CIS-11 and CIS-12 Grade Only CSU and UC*

CIS-16L Object Oriented Programming With C++ Lab *(1 unit lab)* Hands-on experience that enables students to become proficient in implementing application solutions using the C++ programming language, computer hardware, problem-solving tools, and programming software. *Corequisite: CIS-16 Recommended preparation: CIS-11 and CIS-12 CR/NC only CSU and UC*

CIS-18 Visual Basic Programming *(3 units lecture)* An introduction to the fundamentals of object- oriented programming. Students will learn how to create their own Windows Applications using Visual Basic. *Corequisite: CIS-18L Recommended preparation: CIS-11 and CIS-12 Grade Only CSU and UC*

CIS-18L Visual Basic Programming Lab *(1 unit lab)* An activity course which enables students to become proficient in implements object-oriented programming solutions in Visual Basic. *Corequisite: CIS-18 Recommended preparation: CIS-11 and CIS-12 CR/NC only CSU and UC*

CIS-20 Programming With Data Structures *(3 units lecture)* A study of traditional data structures and processing algorithms (files, lists, queues, stacks, trees, sorts, searches). A basic knowledge of problem solving and the "C" programming language is assumed. *Prerequisite: CIS-16 and 16L Corequisite: CIS-20L Grade Only CSU and UC*

CIS-20L Programming With Data Structures Lab *(1 unit lab)* Implementation of data structures using computer hardware in a programming environment. *Prerequisite: CIS-16 and 16L Corequisite: CIS-20 CR/NC only CSU and UC*

CIS-22 Server-Side Web Programming *(3 units lecture)* An introduction to developing dynamic web content using Active Server Pages and server-side scripting languages. Various software tools will be used to develop scalable, interactive, client/server, object-oriented, database-driven web applications that are browser neutral. *Corequisite: CIS-22L Note: A working knowledge of HTML (code level) is assumed. Grade Only CSU*

CIS-22L Server-Side Web Programming Lab *(1 unit lab)* Implementation of Active Server Pages principles learned in CIS-22 using several scripting languages in a hands-on setting. *Corequisite: CIS-22 CR/NC only CSU*

CIS-30 Networking Essentials *(3 units lecture)* A study of current technologies of local and wide area networks and the Internet. Students will be presented with the OSI model, and the TCP/IP protocol in a combined lecture, demonstration, and lab setting. This course can be used as the first in a four-course series leading to Cisco Certified Networking Associate (CCNA) certification and forms the basis for other networking certifications. *Corequisite: CIS-30L Recommended preparation: CIS-11, 77, and 80 Note: A basic understanding of DOS and Windows 98 or later is assumed. Grade Only CSU*

CIS-30L Networking Essentials Lab *(1 unit lab)* An application of the networking technologies learned in CIS-30 in a hands-on laboratory setting. *Corequisite: CIS-30 Recommended preparation: CIS-11, 77, and 80 CR/NC only CSU*

CIS-31 Network Operating Systems *(3 units lecture)* A survey of a network operating systems used in business local area networks, wide area networks, and the Internet. A variety of topics will be covered for several different network operating systems including: network installation, management, and security. *Corequisite: CIS-31L Recommended preparation: CIS-30 and CIS-30L Note: A basic understanding of data communications and networking fundamentals is essential for a student to succeed in this course. Grade Only CSU*

CIS-31L Network Operating Systems Lab *(1 unit lab)* A hands-on survey of installation, management, and troubleshooting topics for several different network operating systems. *Corequisite: CIS-31 Recommended preparation: CIS-30 and CIS-30L Note: A basic understanding of data communications and networking fundamentals is essential for a student to succeed in this course. CR/NC only CSU*

CIS-32 Router Theory and Router Technology *(3 units lecture)* Intermediate study covering current technologies of local and wide area networks and the Internet. Students will be presented with router technologies and techniques. This is the second in a four-course series. *Prerequisite: CIS-30 or equivalent Corequisite: CIS-32L Grade Only CSU*

CIS-32L Router Theory and Router Technology Lab *(1 unit lab)* Implementation of internetworking technology principles learned in CIS 32 using routers in a hands-on setting. *Prerequisite: CIS-30L or equivalent Corequisite: CIS-32 CR/NC only CSU*

CIS-33 Advanced Routing and Switching *(3 units lecture)* Intermediate and advanced technologies of local and wide area networks (LANs and WANs), workgroup switching (including VLANS) and routing (including Access Control Lists, IGRP, and IPX). Students will be presented with current router and routing protocols, technologies and techniques. This is the third in a four-course series. *Prerequisite: CIS-32 or equivalent Corequisite: CIS-33L Grade Only CSU*

CIS-33L Advanced Routing and Switching Lab *(1 unit lab)* Implementation of Internetworking technology principles learned in CIS-33 using workgroup switches and routers in a hands-on setting. *Corequisite: CIS-33 CR/NC only CSU*

CIS-34 Wide Area Networks and Project-Based Learning *(3 units lecture)* A study of current, advanced technologies of wide area networks (WANs), and the Internet. Students will be presented with many advanced WAN technologies and techniques. This is the fourth in a four-course series. *Prerequisite: CIS-33 or equivalent Corequisite: CIS-34L Grade Only CSU*

CIS-34L Wide Area Networks and Project-Based Learning Lab *(1 unit lab)* Implementation of Wide Area Networking (WAN) technology principles used in CIS-34 using a variety of internetworking devices in a hands-on setting. *Prerequisite: CIS-33L or equivalent Corequisite: CIS-34 CR/NC only CSU*

CIS-50 Database Applications *(3 units lecture)* An intermediate to advanced level course in database applications using database management systems software as designed for business. Students will set up, manipulate, and maintain their own databases. *Corequisite: CIS-50L Recommended preparation: CIS-1 and CIS-3 Grade Only CSU*

CIS-50L Database Applications Lab *(1 unit lab)* An activity course which enables students to use computer hardware, software and documentation to complete database lab exercises and projects. *Corequisite: CIS-50 CR/NC only CSU*

CIS-53 Spreadsheet Applications *(3 units lecture)* An intermediate to advanced level course to develop and refine students' understanding of electronic spreadsheet concepts, applications and integration with other applications (graphic and database.) *Corequisite: CIS-53L Recommended preparation: CIS-1 and CIS-3 Grade Only CSU*

CIS-53L Spreadsheet Applications Lab *(1 unit lab)* An activity course which enables students to use computer hardware, software and documentation to complete database lab exercises and projects. *Corequisite: CIS-53 CR/NC only CSU*

CIS-70 Systems Analysis and Design *(4 units lecture)* A study of systems analysis and implementation of business computer systems, including such topics as system life cycles, analysis techniques, design techniques, acquisition, implementation, and maintenance techniques and oral and written communications. *Corequisite: CIS-70L CR/NC option CSU*

CIS-70L Systems Analysis and Design Lab *(2 units lab)* An activity course which enables students to evaluate, install, implement and maintain micro-computer hardware and software. *Corequisite: CIS-70 CR/NC only CSU*

CIS-71 Community Projects *(2 units lab)* A project-oriented course for advanced multimedia students. Students will work with a community organization or business to create computer-based applications such as websites and CD-ROMs for training, information, and/or other social-based needs. Local organizations are invited to propose projects for this class. Specific projects will be selected by the instructor. *Grade Only CSU*

CIS-76 Introduction to the Macintosh *(0.5 unit lab)* An introduction to word processing, spreadsheets, database management systems and graphic editing software on the Macintosh microcomputer. Students will work in the lab to complete in-class assignments. *CR/NC option CSU*

CIS-77 Introduction to PC and MS-DOS *(0.5 unit lab)* An introduction to basic PC/MS-DOS. Students will work in the lab to complete in-class assignments learning basic PC/MS-DOS commands, which will include such topics as disk handling and batch files. *CR/NC option CSU*

CIS-78 Introduction to Programming *(0.5 unit lab)* An introduction to the concepts of computer program-development and implementation. Students will work in the lab to complete in-class assignments using high-level programming language. *CR/NC option CSU*

CIS-80 Introduction to Windows *(0.5 unit lab)* An introduction to IBM compatible business computers operating with the Microsoft Windows graphical interface. Students will learn basic operating controls, commands, and file and disk operations. A brief introduction to the Windows accessories and applications is also covered as well as configuring the Window environment. *CR/NC option CSU*

CIS-81 Introduction to Micro Applications *(0.5 unit lab)* An introduction to word processing, spreadsheets and database management systems software. Students will work in the lab to complete in-class assignments. *CR/NC option CSU*

CIS-83 Guide to the Information Hwy *(0.5 unit lab)* An introductory course that explores the information highway and its underlying telecommunication technology. Students will be given assignments, involving hands-on access to networks and the Internet. *CR/NC option CSU*

CIS-84 Intermediate Macintosh *(0.5 unit lab)* An intermediate to advanced level exploration designed to further develop students' skills in formatting and editing documents and graphics, and in integrating files from different applications into a single document. Students will produce a newsletter or brochure as a final project. *Note: A basic knowledge of microcomputer operating systems is assumed. Grade Only CSU*

CIS-85 Introduction to Java Script *(0.5 unit lab)* An introduction to enhancing Internet Web pages using JavaScript, an Internet scripting language. Participants will learn how to add interactivity to web pages, modify existing JavaScript code, and create original JavaScript solutions. *Recommended preparation: CIS-83 and CIS-84 Note: Intermediate knowledge of the Internet (browsing, searching, and saving files) and HTML (comfortable with frame implementation) is assumed. CR/NC option CSU*

CIS-86 HTML Web Page Design *(0.5 unit lab)* Conception and construction of Web pages/site for the Internet using Hypertext Mark-up Language. Students will create their own pages and post them to the Internet via FTP (file transfer protocol). *Recommended preparation: CIS 83 CR/NC option CSU*

CIS-90 Introduction to MS Excel *(0.5 unit lab)* An introduction in primary spreadsheet fundamentals using MC Excel. Basic fundamentals including worksheet design and modification, formatting techniques, and use of functions will be covered. *Recommended preparation: CIS 80 Grade Only CSU*

CIS-91 Introduction to Electronic Presentations *(0.5 unit lab)* An introduction in electronic presentation fundamentals. Basic features include creating interactive slides, using text, graphics, sound, animation, timing and transitions. *Recommended preparation: CIS-80 or CIS-1/1L CR/NC option CSU*

CIS-98 PC Computer Repair and Maintenance *(3 units lecture)* A practical study of the repair and maintenance of PCs at the component level. This class will introduce digital electronics as well as networks repair. *Corequisite: CIS-98L Grade Only CSU*

CIS-98L PC Computer Repair and Maintenance Lab *(1 unit lab)* A hands-on lab to repair and maintain PCs at the component level. This class will introduce digital electronics as well as networks repair. *Corequisite: CIS-98 CR/NC only CSU*

Construction Technology (CT)

CT-2 Material Sciences: Wood *(2 units lecture / lab)* A survey of the traditional uses of wood, including construction techniques, joinery, and structural systems; decorative and weathering details; deterioration and infestation; and maintenance of elements commonly used in historic wooden buildings. Students will learn how to identify/repair/replace wood defects. *Grade Only CSU*

CT-3 Material Sciences: Masonry/Plaster *(2 units lecture / lab)* A survey of the traditional applications and physical properties of stone, brick, terra cotta, cement, plaster, mortars and grouts, including three-coat plaster, masonry deterioration, stabilization, with various repair and cleaning methods. *Grade Only CSU*

CT-4 Materials Science: Interior Surface Materials *(2 units lecture / lab)* A survey and analysis of historic interior surface materials application for walls and ceilings; topics include paint, wall coverings, and decorative finishes. *Grade Only CSU*

CT-7 Material Science: Glass *(2 units lecture / lab)* A survey of the traditional glazing practices used in historic buildings, covering late-nineteenth century design, application, and techniques including glazing, etching, painting, lead came and copper foil. Students will learn how to identify/repair/replace window glazing defects. *Grade Only CSU*

CT-8 Materials Science: Casting and Mold Making *(2 units lecture / lab)* The study of historic and current materials and techniques used to produce molds for architectural ornament in plaster, terra cotta, ceramics, composition and cast metals. One-part and multi-part molding techniques will be examined using a variety of molding and casting materials. Lab fee: $20 *Grade Only CSU*

CT-10 Introduction to Historic Preservation And Restoration *(3 units lecture)* An overview of the historic preservation movement in the United States, primarily concentrating on 19th and 20th century architectural history of the Western United States. Settlement patterns, architectural context, construction techniques, preservation philosophy and terminology will be presented. Study of architecture within Humboldt County will be a component of this course. *Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

CT-11 Architectural History *(3 units lecture)* A survey of American architecture with an emphasis on the Western United States, emphasizing indigenous building types and construction evolution relative to European influences, settlement patterns, vernacular and regional architectural traditions and styles. *Grade Only CSU*

CT-12 Historic Research and Documentation *(3 units lecture)* A study in the field of historic preservation with an emphasis on historic plans and details. National historic building standards for documentation and Secretary of Interior's Standards will be introduced. Students will conduct both primary and secondary historical research, develop a working architectural vocabulary and gain knowledge of restoration procedures. Course will emphasize necessary skills for sketching and designing components of a structure to scale proportions. Students will *Note: Field trips will be a component of this course. The College does not provide transportation. Grade Only CSU*

CT-13 Historic Building Analysis *(3 units lecture)* A survey of the unique problems found in historic buildings focusing on the deterioration of building materials and systems, training and techniques needed to perform a proper building evaluation, existing condition assessment, and weatherization and stabilization report. *Note: Field trips will be a component of this course. The College does not provide transportation. Grade Only CSU*

CT-15 Field Techniques for Historic Preservation *(3 units lecture / lab)* A practical study of preservation and restoration involving field work on a project determined by the instructor each semester. Scope of work will vary each semester with project. Hand and power tool use and safety will be emphasized. *Note: Safety equipment and appropriate work clothes will be required of student. Personal carpentry tools may be helpful. May be repeated to a maximum of two enrollments. Grade Only CSU*

CT-16 Architectural Millwork *(3 units lecture / lab)* Practice in the safe use of machinery, tools, materials, and processes required to successfully produce and reproduce parts and pieces to historical structures and objects. This course will teach methods to accomplish restoration and reproduction work for the field project. *Recommended preparation: CT 21B or equivalent Note: Field trips will be a component of this course. The College does not provide transportation. Basic shop use and machine tool training are recommended. May be repeated to a maximum of two enrollments. Grade Only CSU*

CT-18 National Register Nomination *(3 units lecture)* Practice in the research and preparation of a National Register Nomination. Students will learn how a property is determined eligible for register designation, the basic skills to undertake the preparation, and an understanding of what Register listing means for the property owner. *Grade Only CSU*

CT-21A Survey of Wood Technology *(3 units lecture / lab)* Introduction to wood as a material that includes wood science, joinery techniques, hand/machine tool use, and safety practices. Student will gain life-long skills through hands-on, project-based learning; both instructor assigned and student choice projects. *CR/NC option CSU*

CT-21B Intermediate Wood Technology *(3 units lecture / lab)* Advanced skills of wood joinery techniques using machinery and current millworking strategies used in cabinetmaking, furniture and architectural millwork applications. Project-based learning includes both instructor assigned and student choice projects. *Prerequisite: CT 21A or equivalent Grade Only CSU*

CT-50 Construction Estimating *(4 units lecture)* An introduction to the techniques and methods of building construction estimating. This course includes a study of employer's cost of labor including payroll, taxes, insurance and overhead. Worker hours and material are computed for each component needed to complete the total building. This class will start with manual estimating skills and then progress to computer estimating. *Grade Only CSU*

CT-55 Advanced Wood Technology *(2 units lab)* Application and analysis of woodworking techniques and skills developed in CT 21A and CT 21B will direct student through completion of hands-on project determined through planning with the instructor. *Prerequisite: CT 21A and CT 21B or equivalent May be repeated to a maximum of four enrollments. Grade Only CSU*

CT-56 Construction Layout *(2.5 units lecture / lab)* A fundamental course for those who need to know how to start a building project. This course will cover the use and care of leveling instruments in laying out buildings, establishing grade elevations, making excavation computations, and staking out a building using batter boards and string. Study of basic math used in construction and the use of a framing square will be components of this course. Students will learn to layout roof rafters: common, hip, valleys, and jacks. Students will also learn to layout a straight staircase. Hands-on lab will strengthen lecture theory. *Recommended preparation: IT-161 or MATH-105/106 Grade Only CSU*

CT-57A Cabinetmaking and Millwork I *(3 units lecture / lab)* Hands-on experience with a complete set of kitchen and bathroom cabinets for the student project house. The course will cover the safe use of all power equipment and hand tools necessary to complete the work. Lecture topics will include: Story Pole, Basic Case Work, Construction Problems, Cabinetmaking Joints, Gluing and Clamping, Frame and Panel Construction, Cabinet Doors, Drawers and Drawer Guides, and Wood—Its Nature and Properties. *Recommended preparation: CT 21A and IT 161 or Math 375/376 Note: A basic tool set will be required: tape measure, pencil, and safety glasses. Grade Only CSU*

CT-57B Cabinetmaking and Millwork II *(3 units lecture / lab)* A continuation of work on cabinets for the student project house. Students will build counter tops with both plastic laminate and ceramic tile. This course also covers finishing techniques and installation of cabinets and appliances. Personal cabinets/projects are permitted when the course cabinets are completed. *Prerequisite: CT 57A Note: A basic tool set will be required: tape measure, pencil, and safety glasses. Grade Only CSU*

CT-57C Cabinetmaking and Millwork III *(3 units lecture / lab)* A hands-on opportunity for students to work on advanced techniques in cabinetmaking principles and practices for cabinets of their own choice. *Prerequisite: CT 57B Note: A basic tool set will be required: tape measure, pencil, and safety glasses. May be repeated to a maximum of two enrollments. Grade Only CSU*

CT-70 Bldg Codes and Standards *(2 units lecture)* Technical information covering pertinent sections of the Building Code and Standards necessary for building inspectors and related workers in the trade will be covered. *Grade Only CSU*

CT-72 Electrical Codes and Standards *(2 units lecture)* Discussion and practice using the National Electric Code by applying its provisions to various technical questions. Oriented especially toward residential wiring. *Grade Only CSU*

CT-77A Residential Plumbing I *(2 units lecture / lab)* An introductory course including safety, care and use of tools; blueprint reading; material estimating; developing basic skills and the ability to apply a wide range of technical information relative to the trade. Students will plumb the project house. *CR/NC option CSU*

CT-77B Residential Plumbing II *(2 units lecture / lab)* A continuation of plumbing skills covering the installation of water closets, lavatories, tubs, and showers, sinks and laundry trays, water heaters, faucets, gauges and hydronic heaters. Students will plumb the student project house. *Prerequisite: CT 77A Grade Only CSU*

CT-78A Residential Wiring I *(2 units lecture / lab)* A study of the basic theory of residential wiring circuits, blueprint reading, materials, selection, installation methods, basic code requirements and practice in wiring the student project house. *Grade Only CSU*

CT-78B Residential Wiring II *(2 units lecture / lab)* A continuation of knowledge and skills learned in CT 78A. Topics include: service calculations, installation, additional theory, use of conduit in wiring, remodel wiring, estimating and line drop calculations and completion of the wiring of the student project house. *Prerequisite: CT 78A Grade Only CSU*

CT-78C Residential Wiring III *(2 units lecture / lab)* Improvement and refinement of skills learned in CT 78A and CT 78B. Students will act as group leaders and be involved in problem solving. Specific instruction in relays, motors, 3-phase power, schematics, heating equipment and electronic controls. *Prerequisite: CT 78B or equivalent May be repeated to a maximum of two enrollments. Grade Only CSU*

CT-80 Carpentry Theory I *(3 units lecture)* A study of residential construction methods and materials. This class parallels progress on the student built project house. Topics will include: building layout, foundations, floor, wall, and roof framing, wall and roof sheathing, soffits and roof coverings. *Grade Only CSU*

CT-81 Carpentry Theory II *(3 units lecture)* A study of residential construction methods and materials. This class parallels progress on the student built project house. Topics will include: exterior doors and windows, exterior siding and trim, thermal and sound insulation, drywall, interior doors and trim, stairs, finish flooring, and alternative construction techniques. *Prerequisite: CT-80 Grade Only CSU*

CT-90 Beginning Carpentry I *(3 units lab)* A practical lab where students physically build a house. Students will layout the building; form and pour the foundation (or lay a block foundation), frame the floor, walls, and roof; install roof and wall sheathing, fascia and roofing, and windows. *Corequisite: CT-80 Grade Only CSU*

CT-90L Beginning Carpentry Lab *(3 units lab)* A course to strengthen and reinforce skills through hands-on experience. This course will provide additional instruction in house layout, setting up floor joists, laying the sub- floor, house framing, installation of wall and roof sheathing, installation of the finished roof, gutter and fascia, windows, siding, exterior trim and exterior doors, installing insulation, drywall, prehanging and installing doors, installing cabinets, shelving, finish hardware, base and interior trim, building stairs, taping and texturing drywall, staining and painting, and final clean up. *Prerequisite: CT-90 or CT-91 or concurrent enrollment in CT-90 or CT-91. May be repeated to a maximum of two enrollments. Grade Only CSU*

CT-91 Beginning Carpentry II *(3 units lab)* A lab where students build a house. Students will install exterior trim and siding, doors, interior trim and hardware. and miscellaneous finish products, build decks, and form and pour concrete flatwork. *Corequisite: CT-81 Grade Only CSU*

CT-95 Intermediate Carpentry I *(3 units lab)* A lab to practice and reinforce skills through hands-on experience. Students will layout the building, form, and pour the foundation (or lay a block foundation); frame the floor, walls, and roof; install roof and wall sheathing; fascia and roofing, and windows. *Prerequisite: CT-91 Grade Only CSU*

CT-95L Intermediate Carpentry Lab *(3 units lab)* A lab to reinforce skills through hands-on experience. Students will install exterior trim and siding, doors, interior trim and hardware and miscellaneous finish products; and build decks, and form and pour concrete flatwork. *May be repeated to a maximum of two enrollments. Grade Only CSU*

CT-96 Intermediate Carpentry II *(3 units lab)* A course to strengthen and reinforce skills through hands-on experience. Includes instruction in hanging interior doors, installing paneling, building wardrobe and clothes closets, installing baseboards, window jambs, casing, stools and aprons, installing masonry work for wood stove, installing wood stove, completing cathedral ceilings and setting finish hardware. *Prerequisite: CT-91 Grade Only CSU*

CT-130A Fine Woodworking: Theory and Practice *(18 units lecture / lab)* An introduction to traditional and contemporary cabinetmaking. A study of refinements in the use of joinery, tools, the elements of design, and incorporation of these into individual projects will be included. *Prerequisite: CT 21A, CT 21B or equivalent experience CR/NC option*

CT-130B Fine Woodworking: Theory and Practice *(18 units lecture / lab)* In this course, students will have the opportunity to learn and apply fundamental woodworking skills or improve and strengthen their existing skills through different applications. A survey of the aesthetics of project design, construction procedures and advanced techniques will be presented. Hands-on assistance will be provided to the student during the process of completing a project. *Prerequisite: CT 130A Grade Only*

CT-133A Fine Woodworking: Special Studies *(16 units lab)* This course provides individual studies in advanced cabinetmaking. Specific projects are determined with the instructor. Course hours are divided between an in-depth study of wood as applied to technical and aesthetic aspects of cabinetmaking, machine techniques and had tool methods relating to excellence in woodworking, i.e., the creation of fine furniture that combines personal expression with function that is pleasing and proper. Outside reading and group presentation on chosen projects are encouraged. *Prerequisite: CT 130B Note: CR 133A is open only to students previously selected by prior application procedure and a screening process. Grade Only*

CT-133B Fine Woodworking: Special Studies *(16 units lab)* This course provides individual studies in advanced cabinetmaking. Specific projects are determined with the instructor. Course hours are divided between an in-depth study of wood as applied to technical and aesthetic aspects of cabinetmaking, machine techniques and hand tool methods relating to excellence in woodworking, i.e., the creation of fine furniture that combines personal expression with function that is pleasing and proper. Outside reading and group presentation on chosen projects are encouraged. *Prerequisite: CT 133A Note: CR 133B is open only to students previously selected by prior application procedure and a screening process. Grade Only*

CT-135 Tools and Technique *(3 units lecture / lab)* Students will receive instruction in the making, tuning and proper use of wooden hand planes including the jointer, polisher and curved-bottom plane. Traditional woodworking joinery techniques will be studied and performed at the bench including: edge joining and coopering, dowelling, hand-cut dovetails, frame and panel work and mortise work. *May be repeated to a maximum of two enrollments. CR/NC only*

CT-195A Carpentry and Remodeling *(5 units lecture / lab)* A course designed to provide the student with an overview of the theoretical and practical aspects of construction remodeling. *Grade Only*

CT-195B Carpentry and Remodeling *(5 units lecture / lab)* A course designed to provide the student with an advanced overview of the theoretical and practical aspects of construction. Emphasis will be on the hands-on approach in remodeling and constructing structures. *Prerequisite: CT 195A Grade Only*

Cooperative Education (CE)

CE-41 General Cooperative Education *(1 - 3 units WEX)* A course designed to assist students in planning and accomplishing meaningful learning objectives at their place of employment or training sites. The course will emphasize: application of desirable work habits, safety on the job, developing healthy work attitudes and acquisition of transferable job skills. To participate in this program, the student's job does NOT need to be related to educational and career goals or college course work. Work study students are encouraged to participate Variable 1- 3 units; 75 - 225 total work lab hours per semester. *Note: Open to all interested students. Students must enroll in and complete at least 7 units (including Cooperative Education) for each semester of enrollment. Students will obtain required forms and further instructions as indicated in the schedule of classes for the semester of enrollment. May be repeated to a maximum of four enrollments. CR/NC option CSU*

CE-42 Occupational Cooperative Education *(1 - 4 units WEX)* A course designed to expand the learning and career awareness opportunities for students through employment or training sites in the occupational areas for which their college program or major is designed. This course will provide meaningful on-the-job learning experiences through planned and mutually agreed upon learning objectives. The job the student holds must be directly related to educational and career goals and college course work. Work study students are encouraged to participate. Variable 1 to 4 units based upon 75-300 total work lab hours. *Note: Open to all interested students. Students must enroll in and complete at least 7 units (including Cooperative Education) for each semester of enrollment. Students will obtain required forms and further instructions as indicated in the schedule of classes for the semester of enrollment. May be repeated to a maximum of four enrollments. CR/NC option CSU*

Court Reporting (CR)

CR-119C Court Reporting-Practicum *(1 unit lab)* Provides the state-mandated internship in reporter training. The student sits with working reporters in court, deposition and hearing reporting situations. *Grade Only*

CR-119P Reporting Procedures and Research *(3 units lecture)* This course teaches transcription style and procedures for deposition and court transcripts; ethics for reporters; code sections relating to reporting; general and legal research necessary in transcript preparation; and the reporter's duties as a notary and reporter. *Grade Only*

CR-119R CSR-RPR Examination review *(1 unit lecture)* A comprehensive review of all academic classes taken in preparation for the CSR or RPR examinations. Subject areas for review are medical and legal terminology, grammar and spelling and professional practices and applicable code sections. *May be repeated to a maximum of two enrollments. CR/NC only*

CR-121 Medical Terminology for Machine Shorthand I *(1.5 units lecture)* The study and implementation of medical terminology and computer-compatible machine shorthand. Course covers the basic structure of medical terminology, and selected anatomy and physiology terms. The student learns pronunciation, spelling, definitions, and computer-compatible, machine-stenographic outlines of all materials covered. *Grade Only*

CR-122 Medical Terminology for Machine Shorthand II *(1.5 units lecture)* A continued study of medical terminology and computer-aided shorthand, covering terms related to the various systems of the body and psychiatry. The student learns pronunciation, spelling, definitions, and computer-compatible machine-stenographic outlines of all materials covered. *Grade Only*

CR-124 Touch Shorthand Theory *(3 units lecture)* Touch shorthand machine theory and operation. The student will learn a concise, conflict-free method of writing machine short- hand that will be computer-readable. *Grade Only*

CR-124L Touch Shorthand Theory - Lab *(1 - 3 units lab)* Assigned daily project involving machine practice, note reading, transcription, and computer tutorials. Variable 1-3 units, 3-lab per week. Units offered may vary by semester. Consult Schedule of Classes for section information. *CR/NC only*

CR-125L Ct Reporting Transcript Format Lab *(1 unit lab)* Activities to introduce statutorily required and private enterprise specialized format used in deposition and court transcripts, including cover sheets, appearance pages, indices, pages, certificates, and worksheets. *May be repeated to a maximum of four enrollments. CR/NC only*

CR-126L Ct Reporting Computer Applications Lab *(1 - 3 units lab)* Activities to introduce court-reporting software. The student will develop a dictionary, learn the basics of transcript production, create and use include files, and learn real-time basics. Variable 1-3 units, 3-lab per week. Units offered may vary by semester. Consult Schedule of Classes for section information. *May be repeated to a maximum of four enrollments. CR/NC only*

CR-150G Punctuation of the Spoken Word *(1 unit lab)* Teaches correct punctuation of the spoken word so that legal transcripts can be reproduced accurately. *Grade Only*

CR-150L CSR-RPR Licensure Lab I *(2 - 6 units lab)* Computer-compatible machine-shorthand proficiency through systematic exercise. The student will develop the skills necessary to write and read back computer-compatible machine- shorthand notes produced by reporting unfamiliar legal, judicial, legislative, and literary material dictated in a variable multi-voice format 80-225 wpm). In addition, the student will develop the skills attendant to real-time reporting, writing for the hearing impaired, transcription production, note reading, and scoping. The student will also be introduced to court-reporting software, will create a

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personal dictionary, and will meet the eligibility requirements for the Certified Shorthand Reporter and Registered Professional Reporter licensure examinations. *Note: Repeatable to a maximum of eight enrollments. CR/NC only*

CR-160L CSR-RPR Licensure Lab II *(2 - 6 units lab)* A continuation of CR-150L, available to students who have yet to complete the 220-225 wpm Certified Shorthand Reporter/Registered Professional Reporter licensure examinations minimum-qualifying computer-compatible machine-shorthand proficiency. *Prerequisite: CR-150L May be repeated to a maximum of eight enrollments. CR/NC only*

Dance (DANCE)

DANCE-30 Modern Dance *(0.5 - 1 unit lab)* This course provides instruction in the basic techniques of creative modern dance. Instruction varies with the skills and backgrounds of the individual student. *May be repeated to a maximum of four enrollments. CR/NC option CSU and UC*

DANCE-31 Jazz Dance *(0.5 - 1 unit lab)* This course provides instruction in the basic techniques of jazz dance. Opportunity will be provided to work as individual and as groups on dance projects. *May be repeated to a maximum of four enrollments. CR/NC option CSU and UC*

DANCE-32 Ballet *(0.5 - 1 unit lab)* An introduction to the basics of ballet including barre exercises, floor exercises, and adage combinations. The study of ballet terminology and the history behind some ballets will also be included. Instruction varies with the skills and backgrounds of the individual student. *May be repeated to a maximum of four enrollments. CR/NC option CSU and UC*

DANCE-34 Dance Fundamentals *(0.5 - 1 unit lab)* This course is designed for the student who has never studied dance before or requires additional training in basic skills. It will include warming up, stretching, strength and flexibility exercises, rhythm, dance patterns, alignment, jumps, locomotors, isolations, tempo, dynamics, direction, partnering and coordination. *May be repeated to a maximum of four enrollments. CR/NC option CSU and UC*

Dental Assisting (DA)

DA-153 Dental Science I *(2 units lecture)* A course in anatomy and physiology to include dental terminology and the anatomy of the head and neck. Oral physiology, dental embryology and histology and tooth morphology are examined. Also covered: cells, tissues, membranes and the reproductive, skeletal, nervous, muscular, respiratory, digestive, excretory, circulatory and endocrine systems; the history, identification, classification, morphology and characteristics of microorganism; and the causes and prevention of disease. *Corequisites: DA-154 DA-155 DA-156 Grade Only*

DA-154 Dental Materials *(3 units lecture / lab)* Instruction in the preparation of materials used in chair-side assisting such as cements, composites and amalgams, crowns and bridges and the set up required for each. Also studied will be the manipulation of dental materials ordinarily used in the dental office such as gypsum products, alginates, impression materials, waxes and impression pastes. Construction of custom impression trays, preparation of models and temporary crowns are included. *Corequisites: DA-153 DA-155 DA-156 Grade Only*

DA-155 Dental Radiography *(2 units lecture / lab)* Experiences are provided to make the student aware of principles of roentgenographic physics, history of radiation, biological effects of radiation, patient and operator protection, types of films, exposure and processing techniques and mounting of films. Full mouth X-ray surveys taken on mannequins. *Corequisites: DA-153 DA-154 DA-156 Grade Only*

DA-156 Introduction to Chairside *(4 units lecture / lab)* A study of pre-operative procedures, health history and oral exams; function, care and maintenance of equipment and instruments; patient care; introduction to operative and postoperative procedures including sterilization and disinfection of operatory and armamentarium. OSHA and hazard communication requirements are discussed and implemented. Students will learn 4-handed dentistry, charting, anesthetic preparation, amalgam and composite tray set ups, rubber dam and matrix placement and temporary restorations. The on-campus Dental Health Center provides clinical experience. *Corequisites: DA-153 DA-154 DA-155 Grade Only*

DA-163 Dental Science II *(3 units lecture)* A course which reviews infectious diseases. Preventive measures will include: effective oral hygiene, use of fluorides and the use of various dental aids along with the role of nutrition in preventive dentistry. Ways to incorporate a patient education program into a dental practice are discussed. Patient and self motivation techniques necessary to achieve this are stressed. Discussion and descriptions of various oral lesions and disease processes are covered. Description and use of drugs common to dental treatment are discussed along with medical and dental emergency procedures. Techniques to treat special patients are examined. A study of the history of dentistry and the professional organizations completes the course. *Prerequisite: DA 153 Corequisites: DA-164 DA-165 DA-166 DA-167 Grade Only*

DA-164 Dental Specialties and Expanded Duties *(3 units lecture / lab)* A course which will provide instruction in the procedures and tray setups for specialties of dentistry including endodontics, oral surgery, periodontics, pedodontics and orthodontics. Experiences are offered for the application and advanced skills and knowledge in the area of expanded duties in compliance with the requirements of the California Dental Practice Act. *Prerequisite: DA-153, DA-154, DA-155, DA-156 Corequisites: DA-163 DA-165 DA-166 DA-167 Grade Only*

DA-165 Dental Radiography II *(2 units lecture / lab)* Instruction in advanced techniques of dental radiography, anatomical landmarks and dental anatomy pertaining to dental radiography. Emphasis on evaluation of films, exposing full- mouth radiographs on patients for diagnosis by a dentist, extra oral film techniques and in distinguishing between normal dental anatomy and anomalies or pathological conditions. *Prerequisite: DA-153, DA-154, DA-155, DA-156 Corequisites: DA-163 DA-164 DA-166 DA-167 Grade Only*

DA-166 Dental Assisting Office Management *(1 unit lecture)* This course includes billing and collection procedures, banking, financial records, fees, and credit management. Also covered are telephone techniques, appointment scheduling, mail handling, record keeping, filing, organization and care of office and equipment, management responsibilities, insurance procedures, forms used in dental offices and computerized office management. *Prerequisite: DA-153, DA-154, DA-155, DA-156 Corequisites: DA-163 DA-164 DA-165 DA-167 Grade Only*

DA-167 Dental Clinical Experience *(6 units lecture)* Clinical practice in working as part of the complete dental team using 4-handed dentistry under the direct supervision of dentists and the dental assisting faculty in the on-campus Dental Health Center and selected private offices. Development of professional attitude in all phases of dental assisting and skill in the use of equipment. Emphasis placed on all areas of dentistry including expanded duties as required by the California Dental Practice Act. Weekly seminars to evaluate and review clinical experience are also included. Ethics, jurisprudence and psychology in the dental office are emphasized. *Prerequisite: DA-153, DA-154, DA-155, DA-156 Corequisites: DA-163 DA-164 DA-165 DA-166 Grade Only*

Diesel Heavy Equipment Technology (DHET)

DHET-54 Diesel Engine Theory *(4 units lecture / lab)* Study of two-stroke and four-stroke diesel engine theory, including design, engine overhaul, rebuild processes, and procedures and support component repair. Major manufacturer's engines will be covered. *Grade Only CSU*

DHET-59 Diesel Fuel Systems *(3 units lecture / lab)* Discussion and practice on the operation of the fuel systems used on modern diesel engines with emphasis on the systems used on compression ignition engines. Types covered are common rail, distributor, multiple plunger, and electronic. The economics of system selection, reliability, design performance, power efficiency, and emissions reduction will be discussed. *Grade Only CSU*

DHET-63 Gear Theory and Transmissions *(3 units lecture / lab)* Lecture and hands-on experience with gear design and theory of operation used in mechanical and powershift transmissions. Also, the course will cover lubrication and powerflow of transmissions produced by Eaton/Fuller, Spicer, Caterpillar and Allison. *Grade Only CSU*

DHET-64 Gear Theory and Rear Differentials *(3 units lecture / lab)* A study of gear design lubrication and power flow of differentials produced by major manufacturers. *Grade Only CSU*

DHET-66 Diesel Engine Performance and Analysis *(4 units lecture / lab)* Familiarizes students with engine models, changes in operation, tune-up, and theory and the use of the dynameter, hand-held instruments and gauges for engine analysis and performance. *Grade Only CSU*

DHET-69 Heavy Equipment Machine Practices *(2.5 units lecture / lab)* A course to familiarize the student with specialized machine practices used in the mechanic field for reconditioning blocks, cylinder heads, rods and crankshafts. *Grade Only CSU*

DHET-149 Truck Maintenance and Compliance *(3 units lecture / lab)* A study of truck and equipment maintenance, repair, and modification. Students will learn how to fill out maintenance records to industry standards. *Grade Only*

DHET-150 Power Assisted Brakes *(3 units lecture / lab)* Theory, operation, and maintenance of vacuum, air, and combination braking systems. Electronic controlled and anti-lock brakes will be discussed. *Grade Only*

DHET-153 Truck and Equipment Maintenance *(4 units lecture / lab)* Covers truck and equipment repair and modification. Students will carry out major repair projects involving drive systems, suspension systems, frames and load carrying systems. Emphasis on truck and equipment modifications to fit the vehicle's job requirements. *Grade Only*

DHET-166 Theory and Operation of Agricultural Equipment *(3 units lecture / lab)* A study of traditional farming equipment from basic to high-tech agriculture equipment. Discussion, practices, and presentation on appropriateness and economics. *Grade Only*

DHET-167 Hydraulics and Pneumatics Equipment *(3 units lecture / lab)* Theory and application of fluid and air as used in industry. Topics and procedures covered are the maintenance, repair, and trouble-shooting of pumps, motors, valves, and cylinders. Students will gain a working knowledge of formulas used in hydraulics and leverage factors. *Grade Only*

DHET-168 Introduction to the Transportation Industry *(2 units lecture)* This course is an introduction to the transportation industry, involving an overview of jobs including mechanics, sales, parts, and management. Topics include metric conversions, service and parts manuals, microfiche, laws and ordinances, records, ethics, work habits and resume writing. *Grade Only*

DHET-180 New Generation Diesel Engines *(1 unit lecture / lab)* This course is designed to familiarize students with engine models and changes in operation, tune-up and theory. The Cat, Cummins, and Detroit engines will be studied. Time will also be spent understanding engine brakes and their modifications to fit new style engines. Speakers from industry will be used to bring field experience to the class. *Grade Only*

Digital Media (DM)

DM-10 Digital Media Literacy *(3 units lecture)* An introduction to digital media concepts featuring digital media hardware and software, tools and techniques, survey of digital media applications, and issues relating to the use of digital media. Students conceptualize a media-based project using text, graphics, audio, video, animation, and interactivity and follow a development process to project delivery. *Corequisite: DM-10L CR/NC option CSU*

DM-10L Digital Media Literacy Lab *(1 unit lab)* An activity course enabling students to develop assignments given in DM-10. Students will receive one-on- one and small group instruction in the use of multimedia development software to create applications combining text, graphics, audio, video, animation, and interactivity. *Corequisite: DM-10 CR/NC only CSU*

DM-11 Digital Media Design *(2 units lecture)* An introductory course in multimedia design principles and concepts to be applied to web-based projects and CD-ROM with emphasis on the creative process from storyboards to the final multimedia interface. Students will analyze existing multimedia samples as they develop an interface that incorporates the elements of multi-media relevant to a given application. See the current schedule and DM website for additional course details. *Corequisite: DM-11L Grade Only CSU*

DM-11L Digital Media Design Lab *(1 unit lab)* An activity course enabling students to develop assignments given in DM-11. Students will receive one-on-one and small group instruction in analyzing pre-existing multimedia applications and using multimedia development software to create applications combining text, sound, video, and graphics. *Corequisite: DM-11 CR/NC only CSU*

DM-12 Scripts and Storyboards *(1 unit lecture)* An introduction to developing scripts and storyboards for use in multimedia productions. Students will participate in writing and visual thinking exercises to develop scripts and storyboard drawings. Students will learn how scripts and storyboards are used in the developmental process for computer multimedia based projects. Students will learn to develop storyboards that can be usable to a development team. *CR/NC option CSU*

DM-14 Portfolio Development *(0.5 unit lecture)* A capstone course for DM and other media development disciplines where students compile a digital portfolio by selecting and packaging previously created digital media onto CD-ROM, DVD, videotape, or the Internet. *Corequisite: DM-14L Recommended preparation: DM-22, 23, and/or DM-30 or equivalent CR/NC option CSU*

DM-14L Portfolio Development Lab *(0.5 unit lab)* A hands-on study in a multi-media computer lab enabling students to publish their digital portfolios to CD-ROM, DVD, videotape, other removable media, or the Internet. Intermediate knowledge of multimedia hardware and software is assumed. *Corequisite: DM-14 Recommended preparation: DM-22, 23, and/or DM-30 or equivalent May be repeated to a maximum of two enrollments. CR/NC option CSU*

DM-15 Pre-Production *(3 units lecture)* An introductory course that will explore digital media issues, develop projects for different types of media (i.e., CD ROM, video, web), work with clients, and develop detailed storyboards culminating in a project manuscript. *Grade Only CSU*

DM-20 Media Development *(3 units lecture)* An introduction to developing elements of multimedia. Students learn techniques for graphics and text enhancement and manipulation; audio capture, mix, and editing; video capture and editing; and animation for web-based and CD-ROM multimedia presentations. A basic knowledge of multimedia literacy and multimedia design concepts is assumed. *Corequisite: DM-20L Grade Only CSU*

DM-20L Media Development Lab *(1 unit lab)* An activity course enabling students to develop assignments given in DM-20. Students will receive one-on-one and small group instruction in the use of media development software and hardware. A basic knowledge of multimedia literacy and multimedia design concepts is assumed. *Corequisite: DM-20 CR/NC only CSU*

DM-22 Electronic Publishing *(3 units lecture)* A study in the use of professional software for developing multimedia applications and publishing on the Internet and CD-ROM. Students work as a class team to design, implement, and publish a multimedia presentation with emphasis on the production process: concept, storyboard, content and product development, product testing, final product replication and distribution. A basic knowledge of multimedia design concepts is assumed. *Prerequisite: DM-10/10L and DM-11/11L or equivalent. Corequisite: DM-22L Recommended preparation: DM-20 or DM 70-74 and DM-75 Grade Only CSU*

DM-22L Electronic Publishing Lab *(1 unit lab)* An activity course enabling students to develop assignments given in DM-22. Students will receive one-on-one and small group instruction in the use of professional-level multimedia software and hardware. *Prerequisite: DM-10/10L, DM-11/11L or equivalent Corequisite: DM-22 Recommended preparation: DM-20 or DM 70-74 and DM-75 CR/NC only CSU*

DM-23 Motion Graphics *(3 units lecture)* An intermediate to advanced course using graphics, animation, audio, and video software to develop animation-video sequences for television, film, web delivery, and other types of multimedia productions. Students will learn animation concepts and techniques that have translated from traditional animation to desktop computer animation. Given a project, students will use scripts and storyboards to design and create a video sequence that integrates the basic ingredients of animation: storytelling, design, and control of movement. The current semester's Schedule of Classes identifies the development software used in this course. *Prerequisite: DM-70, DM-71, DM-74, and DM-75, or DM-20 and DM-20L or equivalent Corequisite: DM-23L Grade Only CSU*

DM-23L Motion Graphics Lab *(1 unit lab)* An activity course enabling students to develop assignments given in DM-23. Students will receive one-on-one and small group instruction using animation and video software. Current software and hardware options will be explored. *Prerequisite: DM-70, DM-71, DM-74, and DM-75, or DM-20 and DM-20L or equivalent Corequisite: DM-23 CR/NC only CSU*

DM-24 Cartoon Animation *(3 units lecture)* An introduction to the craft of cartoon animation, which includes understanding how successive positions create lifelike movement. Students conceptualize and develop simple 2 characters by learning how to sketch positions, gestures, and expression. Students learn how to translate the sketched characters to frame-based animation software and use a timeline to create character movement. Students learn industry standard animation techniques for creating characters that talk, think and have feelings. A basic knowledge of computer graphics and 2D design concepts is assumed. *Corequisite: DM-24L Recommended Preparation: DM 10, DM 11, DM 75 Grade Only CSU*

DM-24L Cartoon Animation Lab *(1 unit lab)* An activity course enabling students to develop assignments presented in DM 24. Students will receive one-on-one and small group instruction in the use of professional-level animation software and hardware. *Corequisite: DM-24 Recommended Preparation: DM 10, DM 11, DM 75 CR/NC only CSU*

DM-30 Multimedia Authoring *(4 units lecture)* A capstone course using professional level authoring software to develop interactive multimedia projects for educational use. Each student team will work with a faculty member on campus to create an interactive multimedia application to be used by the faculty member. Students will use project management tools to coordinate the project and follow a production process to the completion of the project. This course is designed for advanced students in the multimedia program. *Corequisite: DM-30L Grade Only CSU*

DM-30L Multimedia Authoring Lab *(2 units lab)* An activity course enabling students to develop assignments presented in DM-30. Students will receive one-on-one and small group instruction in the use of multimedia authoring software and multimedia hardware. *Corequisite: DM-30 CR/NC only CSU*

DM-70A Photoshop I *(0.5 unit lab)* Introduction to the concepts of Adobe Photoshop. In this hands-on course, students work in a multimedia computer lab and use scanning hardware to capture images and learn Photoshop techniques for image manipulation, enhancement, and optimization for web page use. *CR/NC option CSU*

DM-70B Photoshop II *(0.5 unit lab)* Provides intermediate to advanced skills for creative image development for advanced multimedia classes using masks, blending modes, alpha channels, image slices, and web-based animations. *Prerequisite: DM-70A or equivalent May be repeated to a maximum of two enrollments. CR/NC option CSU*

DM-71 Introduction to Draw and Paint Software *(0.5 unit lab)* Introduction to the concepts of Draw and Paint software. In this hands-on course, students work in a multimedia computer lab to develop raster and vector graphics using industry standard graphics software and graphic hardware such as digitizing tablets and scanners for image capture. *CR/NC option CSU*

DM-72 Introduction to 3-D Animation *(0.5 unit lab)* Introduction to the concepts of 3-D animation. In this hands-on course, students work in a multimedia computer lab and develop 3-D animations for titles and other uses in multimedia productions. See the DM website for additional course details. *CR/NC option CSU*

DM-73 Introduction to Digital Audio *(0.5 unit lab)* Introduction to the concepts of digital audio. In this hands-on course students work in a multimedia computer lab to capture, create, and edit sound files to be used in multimedia productions. Students may use various hardware, such as a microphone, cassette player, CD player, and a MIDI keyboard to capture and digitize sound. See the DM website for additional course details. *CR/NC option CSU*

DM-74 Introduction to Digital Video *(0.5 unit lab)* Introduction to the concepts of digital video. In this hands-on course students work in a multimedia computer lab to capture, create, and edit video files to be used in multimedia productions. Students will use VHS and Hi8 hardware and an encoding capture card to translate video from analog to digital formats and then use non-linear editing software to manipulate and enhance digital video clips. *CR/NC option CSU*

DM-75A 2-D Animation I *(0.5 unit lab)* Introduction to the concepts of 2-D animation. In this hands-on course, students work in a multimedia computer lab to develop vector-based animations to be used in multimedia productions and webpages. See the DM website for additional course details. *CR/NC option CSU*

DM-75B 2-D Animation II *(0.5 unit lab)* An advanced study focusing on object-oriented programming using action scripts with emphasis on animations, navigation, forms, games, and other interactive techniques. *Prerequisite: DM-75A or equivalent May be repeated to a maximum of two enrollments. CR/NC option CSU*

DM-76 Introduction to Dreamweaver *(0.5 unit lab)* Introduction to the concepts of Macromedia Dreamweaver. Students will work in a lab environment to develop multimedia web pages using Macromedia Dreamweaver. *CR/NC option CSU*

DM-77 Streaming Media *(0.5 unit lab)* An introduction to developing and delivering streaming media over the Internet. Students will apply the latest compression schemes to digital audio and video files, designing media for delivery at specific bandwidths. Students will work individually and in groups to design, create and publish a web site to display projects developed in class. *Note: A basic understanding of the Internet is assumed. CR/NC option CSU*

Drafting Technology (DT)

DT-24 CAD Graphics *(0.5 unit lab)* A comprehensive overview of Computer-Aided Drafting (CAD) for non-drafting majors. The course focuses on the application of commercial grade CAD software to develop 2-D and 3-D vector graphics, hard copy and digital output, and drawing productivity techniques. *Grade Only CSU*

DT-25 Computer Aided Design and Drafting *(3 units lecture / lab)* An intermediate level study of Computer-Aided Design and Drafting as related to common drafting applications. Students will use CAD software to create, modify, and plot drawings with consideration for productivity and industry standard practices. *Prerequisite: ENGR-23 Grade Only CSU and UC*

DT-31 Civil Drafting Fundamentals *(3 units lecture / lab)* A study of civil design drafting practices and the preparation of drawings used in the civil engineering industry. Students will use Computer Aided Design (CAD) software to complete projects relating to interpretation of survey data, profiles and cross sections, land subdivision, site and grading plans, and basic earthwork calculations. *Prerequisite: DT-25 Recommended preparation: NR-52 Grade Only CSU*

DT-32 Advanced Civil Drafting Applications *(3 units lecture / lab)* An advanced study of civil drafting practices and the preparation of drawings used in the civil engineering industry. Students will use Computer Aided Design (CAD) software to complete projects relating to the development of maps used for transportation, site development, and hydrology. Other topics will include specifications for utilities and underground piping, structural plans, and integration of Geographic Information System (GIS) data. *Prerequisite: DT-31 Grade Only CSU*

DT-44 Advanced CAD Applications *(3 units lecture / lab)* A study and practice of advanced CAD concepts and applications necessary to maximize drafting productivity. Topics include LISP programming, linking, and embedding of CAD data, customizing the user interface, development of macros, and creation of specialized symbol libraries. *Prerequisite: DT-25 Note: Students will be required to have a general working knowledge of a recent release (within the last three releases) of AutoCAD prior to participating in this course. Grade Only CSU*

DT-50 3D CAD Applications *(3 units lecture / lab)* A study and practice of 3D CAD concepts and applications. Students will develop skill in wire frame, surface, and solid model creation. Feature- based parametric modeling will be explored, as well as photorealistic rendering techniques. *Prerequisite: DT-25 Note: Students will be required to have a general working knowledge of a recent release (within the last three releases) of Auto CAD prior to participating in this class. Grade Only CSU*

DT-62 Industrial Drafting *(3 units lecture / lab)* A course to develop students' skills and knowledge in the field of drafting as it relates to industrial manufacturing applications. Topics will include precision dimensioning and tolerancing, thread and fasteners, overview of manufacturing processes and materials, auxiliary and section views, detail drawings of machine parts and assembly drawings. Students will use the CAD/CAM lab to complete their projects. *Prerequisite: ENGR-23 Grade Only CSU*

DT-63 Mechanical Design Drafting *(3 units lecture / lab)* A course designed to develop student's skill and knowledge in the field design drafting in the engineering and manufacturing industry. Topics of study will include casting and forging drawings, weldment drafting, sheetmetal layout, mechanical system and 3-D design and analysis. Individualized projects will allow students to study the elements of industrial design with a focus on design for manufacturing productivity. Students will use the CAD/CAM lab to complete their projects. *Prerequisite: DT-25 Grade Only CSU*

DT-71 Architectural Drafting Techniques *(3 units lecture / lab)* A study of drafting with an emphasis on the development of complete architectural plans. Students will create plan sets with consideration for aesthetics, methods of construction, building codes, and common industry practices. Manual and CAD architectural drafting techniques will be emphasized. *Prerequisite: ENGR-23 or equivalent Grade Only CSU*

DT-73 Residential Design *(3 units lecture / lab)* A study of residential design practices, drafting of working drawings, and development of construction specifications. Students will work collaboratively on the computer-aided design of the Construction Technology project house to be built the following academic year. Design criteria will include lot condition, neighborhood, market value, form, and function. Students will work with local building departments to secure approval of plans. *Prerequisite: DT-71 Grade Only CSU*

DT-80 Modeling and Animation *(4 units lecture / lab)* An introduction to 3-D modeling applications and animation on the personal computer. Students will use commercial grade software to create 3-D visualizations and develop animation routines with consideration for design, color, texture, and light. *Prerequisite: DT-24 or ENGR-23 Grade Only CSU*

Drama (DRAMA)

DRAMA-2 Introduction to Oral Interpretation *(3 units lecture)* The study of literature through performance. Students will share their understanding of literary texts (drama, prose, and poetry) with an audience after analysis and translation of analysis into physical and vocal expression. *Grade Only CSU and UC*

DRAMA-11 Dramatic Writing and Performance: the Monologue *(2 units lecture / lab)* An introduction to dramatic writing and oral interpretation. Students will study the work of contemporary monologists and write and perform short monologues. *CR/NC option CSU*

DRAMA-24 Introduction to Theatre *(3 units lecture)* A general survey of the structures and types of plays, the major periods of dramatic art in their cultural contexts and the nature of dramatic presentation and the collaborative process. *Grade Only CSU and UC*

DRAMA-26 Theatre Production *(0.5 - 4 units lab)* An introduction to all aspects of a theatrical production culminating in the presentation of a play before a live audience. Variable 0.5-4 units, 1.5-12 lab hours per week. Units offered may vary by semester. Consult Schedule of Classes for section information. *May be repeated to a maximum of four enrollments. CR/NC option CSU and UC*

DRAMA-30A Acting I *(3 units lecture / lab)* This course is designed to excise the separate parts of the composite art of acting which includes thought, emotion and specific movement and vocal technique. Emphasis is placed on improvisation and practical exercises leading to formal scene work. The ultimate goal is to develop a firm foundation in basic acting technique. *CR/NC option CSU and UC*

DRAMA-30B Acting II *(3 units lecture / lab)* Study of acting styles with emphasis on character development and script analysis, with continuing work on voice and movement. *Recommended preparation: DRAMA-30A May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

DRAMA-33 Jazz Dance Musical Theater *(2 units lab)* Practice and performance of contemporary jazz dancing using popular, modern and show music. Students will explore, both as spectators and as participants, to style, drama and design of jazz dance as it relates to musical theatre. *Recommended preparation: PE-31A or 32A May be repeated to a maximum of three enrollments. Grade Only CSU and UC*

DRAMA-34 Musical Theatre Production *(1 - 4 units lab)* An introduction to all aspects of musical theatre production, from audition through performance. Variable 1-4 units; 3.0-12 lab hours per week. Units offered may vary by semester. Consult Schedule of Classes for section information. *May be repeated to a maximum of four enrollments. CR/NC option CSU and UC*

DRAMA-38 Introduction - Field Experience in Drama *(2 units lab)* Practical application of dramatic arts through supervised placement at approved local community theatre. Students will contract with community theatres for a semester of experiential service in their area of interest. *May be repeated to a maximum of four enrollments. Grade Only CSU*

Early Childhood Education (ECE)

ECE-1 Introduction to Early Childhood Education *(3 units lecture)* An introduction to essential themes, concepts, and skills related to early childhood education, including knowledge of history and traditions in the field; philosophical, psychological and social foundations of early childhood education; and ethical issues and standards of early childhood educators. *Note: Students must plan their schedules to include up to 15 hours of observation at the campus Child Development Center and/or other approved child care and development program as part of their homework*

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assignments. Campuses with no on-campus Child Development Center will have students observe in community programs with mentor teachers through the California Mentor Teacher Program and/or accreditation by the National Association for the Education of Young Children. If no Mentor Teachers or accredited programs are available, instructor approval of site is required. CR/NC option CSU

ECE-2M Child Growth and Development - Age Five To Thirteen *(3 units lecture)* A study of human development with special emphasis on the development of children from age five to thirteen. Social, emotional, physical, cognitive, language, and aesthetic development both typical and atypical are addressed. Students will explore theoretical approaches and assess their effectiveness in explaining development in the child and family's cultural contexts. *Note: This is a Title 22 core course for School Age emphasis only. Grade Only CSU*

ECE-2Y Child Growth and Development - Prenatal To Age Five *(3 units lecture)* A study of human development with special emphasis on the development of children from the prenatal period to age five. Social, emotional, physical, cognitive, language, and aesthetic development both typical and atypical are addressed. Students will explore theoretical approaches to child development (i.e. Piaget, Vygotsky, Brofenbrenner, Erikson, Gardener) and assess their effectiveness in explaining development in the child and family's cultural contexts. *Note: This is a Title 22 core course. Grade Only CSU*

ECE-5 The Child in the Family and Community *(3 units lecture)* Exploration of the influence of family, culture, community, socioeconomic factors and life style on early childhood education. Students will learn methods to develop partnerships with diverse families in inclusive settings to ensure children's and families' needs are met. Students will also learn about community resources serving the needs of children and families. *Note: This is a Title 22 core course. Grade Only CSU*

ECE-6CH Child Health, Safety and Nutrition *(2 units lecture)* A study of methods to ensure child care and development programs are safe and promote child health and nutrition. Students will review procedures for preventing infectious illness and injury, and examine written health policies. Course material covers mandated reporting of child abuse and neglect. Students will consider how issues of cultural diversity and full inclusion affect program health, safety, and nutrition. *Grade Only CSU*

ECE-6FA Pediatric First Aid & CPR *(1 unit lecture)* Theory and practice of administering emergency first aid and CPR to infants and children. Successful completion meets Community Care Licensing requirements for First Aid and CPR certification. *Grade Only CSU*

ECE-7 Foundations of Play-Based Curriculum *(4 units lecture / lab)* An exploration of the theoretical principles of play-based curriculum which includes: typical and atypical infant and child learning, design and adaptation of environments to promote development and learning, positive guidance, and effective teacher roles. Students will learn how observation and analysis of children's play provide the foundation for curriculum development which meets the needs of children with diverse backgrounds and abilities. Lab experience will enable students to practice these skills in a classroom with children. *Prerequisite: ECE-2Y or 2M with a "C" grade or better Note: This is a Title 22 core course. Fieldwork is to be completed at a campus child development center. If this option is unavailable, students should work with a mentor teacher through the California Early Childhood Mentor Program if one is available or in an accredited program. All sites must be approved by the course instructor. Grade Only CSU*

ECE-9 Implementation of Play-Based Curriculum *(4 units lecture / lab)* An advanced study of methods to implement principles of play-based curriculum in programs for typical and atypical preschool children. Students will deepen their understanding of observation techniques and learn how to design, adapt, and implement curriculum and environments to promote play-based learning. Students will also expand their knowledge and experience to respectfully meet the needs of diverse members of a child care and development community including children, their families and staff members. *Prerequisite: ECE-7 with a "C" grade or better Note: Fieldwork is to be completed at a campus child development center. If this option is unavailable, students should work with a mentor teacher through the California Early Education Mentor Program if one is available or in an accredited program. All sites must be approved by the course instructor. Grade Only CSU*

ECE-10LB1 Field Placement in Early Intervention Settings *(2 units lab)* Implementation of early childhood theory and practice in early intervention settings. Working with a mentor, students assume responsibility for the full range of teaching, care giving, and/or intervention duties for young children in an early intervention setting. *Prerequisite: ECE-7 and 21 with a "C" grade or better Corequisite: ECE-10LC Note: Field work is to be completed at a campus Child Development Center or with a mentor through the California Early Childhood Mentor Program. If none of those options are available, students should work in an accredited program. All sites must be approved by the course instructor. (Students who have completed ECE-10LC and ECE-10LB2, 10LB3 or 10LB4 with a "C" grade or better may enroll without ECE-10LC as a co-requisite.) Grade Only CSU*

ECE-10LB2 Field Placement in Infant-Toddler Early Education Settings *(2 units lab)* Implementation of early childhood theory and practice in infant-toddler child care and development settings. Working with a mentor, students assume responsibility for the full range of teaching, care giving, and/or intervention duties for young children in an infant-toddler setting. *Prerequisite: ECE-7 and 11 with a grade "C" or better Corequisite: ECE-10LC Note: Field work is to be completed*

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at a campus Child Development Center or with a mentor through the California Early Childhood Mentor Program. If none of those options are available, students should work in an accredited program. All sites must be approved by the course instructor. (Students who have completed ECE-10LC and ECE-10LB1, 10LB3 or 10LB4 with a "C" grade or better may enroll without ECE-10LC as a co-requisite.) Grade Only CSU

ECE-10LB3 Field Placements in Play-Based Preschool Settings *(2 units lab)* Implementation of early childhood theory and practice in play-based child care and development setting. Working with a mentor, students assume responsibility for the full range of teaching, care giving, and/or intervention duties for young children in a play-based preschool setting. *Prerequisite: ECE-7 and 9 with a grade "C" or better Corequisite: ECE-10LC Note: Field work is to be completed at a campus Child Development Center or with a mentor through the California Early Childhood Mentor Program. If none of those options are available, students should work in an accredited program. All sites must be approved by the course instructor. (Students who have completed ECE-10LC and ECE-10LB1, 10LB2 or 10LB4 may enroll without ECE-10LC as a co-requisite.) Grade Only CSU*

ECE-10LB4 Field Placement in School-Age Child Care Settings *(2 units lab)* Implementation of early childhood theory and practice in a school-age child care and development setting. Working with a mentor, students assume responsibility for the full range of teaching, care giving, and/or intervention duties for young children in a school-age center or setting. *Prerequisite: ECE-7 and 15 with a grade "C" or better Corequisite: ECE-10LC Note: Field work is to be completed at a campus Child Development Center or with a mentor through the California Early Childhood Mentor Program. If none of those options are available, students should work in an accredited program. All sites must be approved by the course instructor. (Students who have completed ECE-10LC and ECE-10LB1, 10LB2 or 10LB3 with a "C" grade or better may enroll without ECE-10LC as a co-requisite.) Grade Only CSU*

ECE-10LC Seminar for Field Placement in Early Education Settings *(2 units lecture)* A seminar to support students in the implementation of early childhood theory and practice in a variety of child care and development settings. Facilitates the development of skills required to work in the early education field. Provides opportunities for collaboration with peers. *Prerequisite: ECE-7 and one of the following: ECE-9, 11, 15, or 21 with a "C" grade or better Grade Only CSU*

ECE-11 Infant-Toddler Care and Education *(3 units lecture / lab)* An introduction to the principles and practices of quality infant-toddler caregiving. Emphasis is on the relationship between infant-toddler development and the typical and atypical conditions that foster development of security, confidence, and identity in infants and toddlers. Cultural issues, children with special needs in group care, and parent provider communication will also be explored. The course includes field work in a licensed infant-toddler early childhood education program or early intervention program. *Prerequisite: ECE-2Y with a "C" grade or better Grade Only CSU*

ECE-12 Administration of Programs for Children I *(3 units lecture)* A study of administrative aspects of childcare and development programs including program philosophy, licensing regulations, basic employment practices, personnel policies, staff supervision and development, time management, management styles, community resources, budgets, and basic business plans. *Prerequisite: ECE-2Y or 2M, 5, and 7 with a "C" grade or better Grade Only CSU*

ECE-13 Administration of Programs for Children II *(3 units lecture)* A study of the administrative aspects of early child care and development programs including mission statements, Boards of Directors, Labor Laws, ADA, IDEA, leadership development, self evaluation, collaboration with community and educational organizations, advocacy, grants, reporting, taxes, program evaluation, marketing and program operations. *Prerequisite: ECE-2Y or 2M, 5, and 7 with a "C" grade or better Grade Only CSU*

ECE-14 Children With Special Needs in Early Childhood Education *(3 units lecture)* A study of the field of special education birth to age 22 which covers the characteristics of children with special needs and which provides the knowledge and skills required for collaborative special education services. The course will address inclusion of children with special needs into early childhood education and childcare settings. Needs of the child and the family and community resources which support them will be explored. *Prerequisite: ECE-2Y with a "C" grade or better Grade Only CSU*

ECE-15 School-Age Children in Child Care *(3 units lecture / lab)* A study of the significance and the role of school-aged child care as an institution in our society. The course deals with how to involve typical and atypical children in the creation of curriculum for a school-age childcare program, and with the organization and staffing of such a program. This course includes field experience in a school-age childcare program. *Prerequisite: ECE-2M with a "C" grade or better Note: Fieldwork is to be completed at a child development center with a mentor teacher through the California Early Childhood Mentor Program if one is available or in an accredited program. All sites must be approved by the course instructor. Grade Only CSU*

ECE-18 Equity and Diversity in Children's Programs *(3 units lecture)* An exploration of issues of diversity and equity in early childhood education programs. Students will develop cross-cultural knowledge necessary to interact with children and adults from culturally and linguistically diverse groups. Students will examine their own biases and understand how they affect work with typically and atypically developing children and families. Students will develop and understanding of how anti-bias approach enhances the education and self-esteem of children, families, and educators. *Grade Only CSU*

ECE-20 Mentoring and Adult Supervision in Children's Programs *(2 units lecture)* An advanced course designed to teach those working in childcare and development the methods and principles of supervising student teachers, volunteers, parents, and other staff in their classrooms. Emphasis is on the role of experienced classroom teachers who function as mentors to new teachers with diverse backgrounds and learning styles while simultaneously addressing the needs of children, parents, and other staff. Students also learn to effectively evaluate infant's and children's typical and atypical development and program environments, to model best practices in the child care and development field, and to advocate for quality child care and development programs. (Meets the Adult Supervision requirement of the Child Development Permit.) *Prerequisite: ECE 2Y or 2M, ECE 5, ECE 7 with a grade of C or better. Grade Only CSU*

ECE-21 Early Intervention Principles and Practices *(3 units lecture)* An overview and an introduction to caring for infants with high-risk situations and disabilities, birth to age three. Treatments, strategies, and techniques used to serve children and families in the field of early intervention will be explored. The course is designed to support the training needs of early childhood educators, Early Intervention Assistant IIs, parents, and care providers who will serve this population. The course covers parent/professional relationships, the normal grief process associated with the diagnosis of a child with a disability, identification and assessment, community resources and developmental and emergent curriculum. *Prerequisite: ECE-2Y with a grade of C or better. Grade Only CSU*

ECE-22 Working With the Prekindergarten Learning and Developmental Guidelines *(0.5 unit lecture)* Based on extensive research, the course brings California's Prekindergarten Learning and Development Guidelines to life with examples of real classrooms and opportunities for practice using the Guidelines to solve classroom dilemmas. Students will learn how to use the Guidelines as a tool to enrich the important work done with young children and families. *Grade Only CSU*

ECE-23 Heads Up Reading - Part 1 *(1 unit lecture)* Preparation for current or future early childhood teachers and caregivers to enhance the early literacy outcomes of young children by improving teachers' knowledge of early literacy development, and their skills in teaching early literacy to young children from birth through age 5. Part 1 focuses on creating literacy rich environments and the development of literacy, reading and writing. *Note: This is Part 1 of a three-part series: ECE-23, 24, and 25. Grade Only CSU*

ECE-24 Heads Up Reading - Part 2 *(1 unit lecture)* A course to prepare current or future early childhood teachers and caregivers to enhance the early literacy outcomes of young children by improving teachers' knowledge of early literacy development, and their skills in teaching early literacy to young children from birth through age 5. Part 2 focuses on infusing literacy into the preschool curriculum. *Note: This is one part of three part series including ECE-23, 24, and 25. Grade Only CSU*

ECE-25 Heads Up Reading - Part 3 *(1 unit lecture)* A course to prepare current or future early childhood teachers and caregivers to enhance the early literacy outcomes of young children by improving teachers' knowledge of early literacy development, and their skills in teaching early literacy to young children from birth through age 5. Part 3 focuses on assessment and culturally appropriate practice. *Note: This is Part 3 of a three-part series: ECE-23, 24, and 25. Grade Only CSU*

Economics (ECON)

ECON-1 Macroeconomics *(3 units lecture)* This course is an introduction to economics principles, production, consumption, national income, money and banking, organization and business costs. *Grade Only CSU and UC (CAN ECON2)*

ECON-10 Microeconomics *(3 units lecture)* A study of microeconomics that includes the theory of the firm, types of competition, marginal utility and costs. These topics will deal with applications for government policy such as deregulation, unions, antitrust, public sector microeconomics and international trade. *Recommended preparation: ECON-1 Grade Only CSU and UC (CAN ECON4)*

ECON-20 Economic History of the United States *(3 units lecture)* An examination of the development of the American economy and the application of the economic context in which the American society, culture and political institutions and practices evolved during three basic periods: the agricultural and extractive era, and the current information era. *Grade Only CSU and UC*

Education (EDUC)

EDUC-1 Introduction to Education *(1 unit lecture)* An introduction to Education focusing on key issues facing educators and the kinds of knowledge needed by teachers in California and the world. *Grade Only CSU*

EDUC-2 Reading Tutoring Techniques *(2 units lecture)* A study designed to prepare college students for tutoring reading in elementary schools. A variety of tutoring skills are explored including phonemic awareness, letter names and shapes, decoding, vocabulary, comprehension, and higher level thinking. Students will learn how to implement appropriate tutoring techniques for small groups and individual children. *Note: Optional lab class (EDUC-2L) enables students to implement tutoring techniques in an elementary classroom. Grade Only CSU*

EDUC-2L Reading Tutoring Techniques - Lab *(1 - 2 units lab)* Tutoring reading with children from Kindergarten through sixth grade, in an approved elementary school site to allow students to implement skills learned in EDUC-2, Reading and Tutoring Techniques. *Prerequisite: EDUC-2 (or co-requisite of EDUC-2) Note: Students may be responsible for the cost of background clearances required by elementary school sites. May be repeated to a maximum of four enrollments. Grade Only CSU*

EDUC-4 Technology Skills for Educators *(3 units lecture)* This course provides a broad overview of computing skills and terminology in preparation for a career in education. Information and hands-on explorations allow students to develop basic skills for using computers, their peripherals, media equipment, and many common computer applications. Assignments are tailored to meet specific technology competencies mandated by the Commission on Teacher Credentialing. *Grade Only CSU*

Engineering (ENGR)

ENGR-17 Circuit Analysis *(3 units lecture)* An introduction to circuit analysis techniques. Topics covered include circuit laws; natural, forced, and complete response of circuits; steady-state AC circuits and ideal amplifiers. *Prerequisite: PHYS-4B Grade Only CSU and UC*

ENGR-23 Engineering Graphics *(3 units lecture / lab)* A study of engineering graphics techniques for engineers and drafters. Computer-Aided Design and sketching techniques will be used for graphical analysis and solutions of 2D and 3D engineering problems. Topics include orthographic projection, design visualization, industry standard documentation techniques, and 3D modeling. *Grade Only CSU and UC (CAN ENGR2)*

ENGR-35 Statics *(3 units lecture)* A first course in engineering mechanics. Topics covered include vectors and vector algebra, particle equilibrium, rigid body equilibrium, friction, moments of inertia and the principles of virtual work. *Prerequisite: PHYS-4A Grade Only CSU and UC (CAN ENGR8)*

English (ENGL)

ENGL-1A College Composition *(3 units lecture)* Transfer-level expository and argumentative writing with critical reading of nonfiction, fiction, and poetry. A substantial research paper utilizing proper MLA documentation is required. *Prerequisite: ENGL 150 (or equivalent) with a "C" grade or better, or assessment recommendation for ENGL-1A Grade Only CSU and UC (CAN ENGL2)*

ENGL-1B Composition and Critical Thinking *(3 units lecture)* Using literature as a basis for critical thinking and composition, students analyze issues, problems, and situations represented in literature and develop effective short and long written arguments (6,000 word minimum) in support of that analysis. The course is designed for those students who seek to satisfy both the full year composition and the critical thinking transfer requirements. *Prerequisite: ENGL-1A (or equivalent) with a "C" grade or better. Grade Only CSU and UC*

ENGL-5 Word Origins and the English Language *(3 units lecture)* This course is designed to increase vocabulary and language awareness. Increasing personal vocabulary will be approached etymologically; that is, through an understanding of the origins of words. A knowledge of Latin and Greek word elements will be emphasized. In addition, the English language will be studied: its history, nature and impact on the individual. Students will be asked to analyze the linguistic environment in which they live. How do words lead, mislead and empower? *Grade Only CSU and UC*

ENGL-8 Introduction to Contemporary Literature *(3 units lecture)* An introduction to the study of great literature. Students will read and discuss a variety of representative works of poetry, fiction and drama from 1945 - present and develop skills necessary to approach literary masterpieces confidently. *Prerequisite: ENGL-1A (or equivalent) with "C" grade or better Grade Only CSU and UC*

ENGL-9 Introduction to Modern Literature *(3 units lecture)* An introduction to the study of great literature from the Enlightenment through the early 20th century. Students will read and discuss a variety of representative works of poetry, fiction and drama, developing the necessary skills to approach literary masterpieces confidently. *Prerequisite: ENGL-1A (or equivalent) with "C" grade or better Grade Only CSU and UC*

ENGL-10 Introduction to Classical Literature *(3 units lecture)* An introduction to the study of great literature from antiquity through the Renaissance. Students will read and discuss a variety of representative works of poetry, fiction and drama, developing the necessary skills to approach literary masterpieces confidently. *Prerequisite: ENGL-1A (or equivalent) with a "C" grade or better Grade Only CSU and UC*

ENGL-15 Introduction to American Literature *(3 units lecture)* Selected readings from the major writers of the United States, such as Emerson, Thoreau, Melville, Poe, Hawthorne, Dickinson, Whitman, Hemingway and Steinbeck. Students will be taught to read critically in these works so as to understand the ideas and the historical and cultural implications. *Recommended preparation: ENGL-1A Grade Only CSU and UC*

ENGL-17 American Literature: Colonial - Civil War *(3 units lecture)* Selected readings from the major writers of the United States from its colonial beginnings through the Civil War. Students will read critically and analytically in these works so as to understand their ideas and historical and cultural implications. *Recommended preparation: ENGL-1A Grade Only CSU and UC*

ENGL-18 American Literature: Civil War - World War II *(3 units lecture)* Selected readings from the major writers of the United States from post-Civil War through World War II. Students will read critically and analytically in these works to understand their ideas and historical and cultural implications. *Recommended preparation: ENGL-1A Grade Only CSU and UC*

ENGL-20 Introduction to Non-Western Literature *(3 units lecture)* An introduction to the literatures of Asia, Africa, and Latin America through the study of major works in their literary and cultural contexts. contexts. Selected readings are from both ancient and modern authors and include poetry as well as representative myths, epics, stories, and narratives. *Recommended preparation: ENGL-1A Grade Only CSU and UC*

ENGL-22 Greek Mythology *(3 units lecture)* An examination of classical Greek mythology as stories whose ultimate meaning is psychological rather than concrete. The course examines the relationship of mythology, which expresses that which is most universally human within material that is often personal or historical in origin, with the archetypal patterns in literature. *Recommended preparation: ENGL-1A Grade Only CSU and UC*

ENGL-28 Women in Literature *(3 units lecture)* This course examines literature by and about women from the Middle Ages to the present, with an emphasis on contrasting mythical interpretations of what women are with what women themselves have written about their lives. Short stories, novels and poems are studied in terms of the literary elements used to reinforce the authors' themes. *Grade Only CSU and UC*

ENGL-29 Children's Literature *(3 units lecture)* This course is designed for adults who are interested in evaluating, selecting and sharing children's literature and who would like to help children develop and appreciation for books and a respect for our literary heritage. Selected children's books, contemporary and classic, will be read and studied. *Grade Only CSU*

ENGL-32 Creative Writing: Poetry *(3 units lecture)* This course involves analysis of literary models, poetry and practice in generating, writing and polishing poetry; includes student and teacher critiques. *CR/NC option CSU*

ENGL-33 Creative Writing: Prose *(3 units lecture)* This course involves analysis of literary models and prose writing (primarily short fiction); includes student and teacher critiques. *CR/NC option CSU*

ENGL-41 English Skills Tutoring *(3 units lecture / lab)* Tutoring primarily basic skills students in English in the Writing Center while simultaneously acquiring (in the seminar portion) specific skills and techniques in tutoring. Students will learn how to question and to listen more effectively, how to evaluate, diagnose, and remediate writing problems, and how to assess which tutoring strategy is most appropriate for the individual learning situation. *Note: Prospective students must obtain a faculty reference. Contact English Department Chair for details. Grade Only CSU*

ENGL-42 Great Writers: Ancient World to the 20th Century *(3 units lecture)* A study of major writers of the western world (excluding English and American authors) from the ancients to the Twentieth Century. Students will read critically in these works so as to understand historical and cultural implications and relationships to other works. *Recommended preparation: ENGL-1A Grade Only CSU and UC*

ENGL-45 Introduction to English Literature Chaucer to the Present *(3 units lecture)* An analysis of the major British literary movements from the Middle Ages to the present, which scrutinizes representative works of Chaucer, Shakespeare, Donne, Bronte, Tennyson, Yeats, Woolfe, Lawrence, and others. *Recommended preparation: ENGL-1A Grade Only CSU and UC*

ENGL-47 Introduction to Shakespeare *(3 units lecture)* An introduction to Shakespeare's drama through the study of major works in their literary, intellectual, and social contexts. Readings will include poetry as well as six to eight representative comedies, tragedies, histories, and romances. *Recommended preparation: ENGL-1A Grade Only CSU and UC*

ENGL-70 Student Magazine Production *(2 units lecture / lab)* This class will produce a student literary magazine, in conjunction with a graphic design class. Students will solicit, select and edit material for publication and will market the magazine. *May be repeated to a maximum of two enrollments. CR/NC option CSU*

ENGL-150 College Reading and Writing *(3 units lecture)* A course in the development of college-level reading and writing skills. Written work progresses from brief essays to college-level essays based on critical reading. This course is not transferable to a four-year university. *Prerequisite: ENGL-350 (or equivalent) with a "C" grade or better, or assessment recommendation for ENGL-150 or 1A Corequisite: ENGL-150L Grade Only*

ENGL-150L College Grammar Review Lab *(0.5 unit lab)* A review of college entry-level grammar, usage and mechanics. This lab is valuable for students wishing to strengthen these skills in a self-paced lab environment. *Corequisite: ENGL-150 CR/NC only*

ENGL-152 The English Lab *(0.5 - 2 units lab)* The English Lab provides individual, personal instruction for students with specific writing problems. Instructors teach basic skills, organizational patterns and individual refinements of writing styles. Variable 0.5-2 units, 1.5-6 hours per week. *Corequisite: Enrollment in a writing class such as ENGL 150 or ENGL 1A, or in a class which requires the writing of essays or essay examinations. May be repeated to a maximum of four enrollments. CR/NC only*

ENGL-153 ESL College Reading and Writing *(3 units lecture)* An advanced study for ESL students to gain confidence in college-level grammar, reading, and writing skills. Written work progresses from brief essays to college-level essays based on critical reading. The grammar segment emphasizes second language errors, which students learn to identify and correct. This course is not transferable to a four-year university. *Prerequisite: ENGL-350 or ENGL-353 with a "C" grade or better, or assessment recommendation for ENGL-150 or 153 Corequisite: ENGL-150L Grade Only*

ENGL-350 Reading and Writing Skills *(5 units lecture)* Basic written communication and reading skills, emphasizing the fundamentals of English grammar, sentence structure, punctuation, standard English usage, as well as reading comprehension at the literal, inferential, and critical levels. Written work with integrated readings from the paragraph to the short essay. *Prerequisite: Successful completion of ENGL-360 (or equivalent), or assessment recommendation for ENGL-350 Corequisite: ENGL-350L CR/NC option*

ENGL-350L Reading and Writing Skills - Lab *(1 unit lab)* A review of basic written communication and reading skills. *Corequisite: ENGL-350 CR/NC only*

ENGL-353 ESL Reading and Writing Skills *(5 units lecture)* A basic study in written communication and reading skills designed for second language students. Class instruction will emphasize the fundamentals of English grammar, sentence structure, punctuation, standard English usage, as well as reading comprehension. Written work progresses with integrated readings from the paragraph through the short essay and focuses on identifying and eliminating second language errors. *Prerequisite: Assessment recommendation for ENGL-353 Corequisite: ENGL-350L CR/NC option*

Environmental Science (ENVSC)

ENVSC-10 Introduction to Environmental Science *(3 units lecture / lab)* A course for non-science majors emphasizing the principles of ecology. Ecosystem structure and function, biodiversity, evolution, extinction and population dynamics will be studied. These concepts will be applied to the analysis of environmental problems. Laboratories stress field and laboratory work involving observation, data collection and analysis. *Grade Only CSU and UC*

ENVSC-11 Environmental Ethics *(3 units lecture)* An examination of philosophical issues and a critical analysis of moral and ethical judgments pertaining to values, decisions and individual actions. These judgments will be applied not only to human rights but the rights of plants, animals and the land. *Grade Only CSU and UC*

ENVSC-12 Earth's Changing Climate *(3 units lecture)* A planet-scale look at the Earth's atmosphere and climate. This course will include an in-depth look at the factors controlling climate, its changes from year to year, and the timeline of global climatic changes. This course is an interdisciplinary introduction to the Earth's climatic system and interactions. *Grade Only CSU and UC*

ENVSC-15 Introduction to Energy *(3 units lecture)* A survey of humanity's past and present use of available energy resources and an examination of potential future directions in energy use. Emphasis is placed on environmental, social, political and economic considerations. Guest speakers and videotapes are included. Students completing this course should be knowledgeable about local, national and world energy resources uses and options for the future. *CR/NC option CSU and UC*

ENVSC-22 Solar Heating Design *(2 units lecture)* A course in passive solar design for space heating, cooling and domestic water heating. Remodeling existing structures, discussion of new construction and collector sizing will be covered. *Recommended preparation: Math-105/106. Grade Only CSU*

Fire Science (FS)

FS-100 Fire Protection Organization *(3 units lecture)* Provides an introduction to fire protection, career opportunities in fire protection 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, and introduction to fire strategy and tactics. *May be repeated to a maximum of three enrollments. CR/NC option*

FS-110 Fire Fighter I Course *(10 units lecture / lab)* A basic Firefighter I Academy that conforms to standards for certification by the California State Board of Fire Services. In partial fulfillment of the requirements for the Firefighter 1 Certificate issued by the State of California. *CR/NC option*

Forest Technology (FOR)

FOR-1 Introduction to Forest/Natural Resources *(3 units lecture / lab)* An introduction to the forestry and natural resource management professions. The history of forestry and natural resource management in the U.S. will be studied, as well as the current policies and issues affecting the management of our resources. Basic concepts and practices involving forest ecology and growth, measurements, wildlife, recreation, and watershed management will be covered, as well as forestry and natural resource management career possibilities. *Note: Field trips are required. The College does not provide transportation. Grade Only CSU and UC*

FOR-3 Forestry and Related Resources *(3 units lecture)* An introduction to the basic issues related for forest land management and preservation decisions. The course will cover the impacts of these decisions on timber, soil, water, wildlife, recreation, range land and minerals. The course also addresses the importance of human values, ethics, political and economic influences. Past, present and future uses of forest land are examined. *CR/NC option CSU*

FOR-5 Applied Forest Ecology *(3 units lecture / lab)* An introduction to the basic theories of forest ecology and better management strategies. While generally broad based, the course will focus on topics such as disturbance, competition, and regeneration ecology more closely because of their direct relationship to management activities. Laboratory exercises will provide collaborative and experiential learning opportunities as linkages between the field and theory are examined. *Recommended preparation: FOR-1, FOR-51 Grade Only CSU*

FOR-50 Silviculture *(3 units lecture / lab)* A study of the science and practice of tending and growing a forest. Basic silvicultural practices will be covered, including planting or starting a new forest to thinning and caring for the forest as it grows, to the time it is ready to be harvested. Measurement techniques will be used to determine the type of treatment needed based on the landowner's objectives and the ecosystem's requirements. *Recommended preparation: FOR-1 Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

FOR-51 Dendrology *(3 units lecture / lab)* The study of forest plant identification, taxonomy, and classification. Forest habitats, ecotypes, plant associations, and forest vegetation types will be discussed, emphasizing those widespread in the Pacific Northwest. Botanical characteristics, commercial and non-commercial uses, and ranges of selected forest species are covered. *Note: Field trips are required, including one weekend field trip. The College does not provide transportation. Grade Only CSU*

FOR-59 Forest Mensuration *(1.5 units lecture / lab)* The application of natural resource inventory skills to design, layout, and perform a timber cruise using fixed radius plot sampling, variable plot (point) sampling, and 3-P sampling. Scaling will also be covered along with cull determination and grading of logs and trees. Electronic data collectors will be used along with paper tally sheets to collect data. Results will be obtained by hand and on the computer. *Prerequisite: NR-54 Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

FOR-60 Forest Health and Protection *(3 units lecture / lab)* An examination of the elements of forest health including forest pest management concepts. This includes learning how to identify forest pests and pest complexes in the coastal region, the impacts of pests on forest systems and the important pest management strategies. Emphasis will be on prevention strategies common in Integrated Pest Management as well as host- resistance and cultural controls and direct chemical methods. *Prerequisite: FOR-1 and FOR-51 Note: Weekend field trips are required. The College does not provide transportation. CR/NC option CSU*

FOR-77 Wildland Fire Suppression *(3 units lecture)* A lecture course for practical knowledge and skill in the development and implementation of fire suppression and control plans through the application of fire behavior factors and suppression techniques. *Grade Only CSU*

FOR-96 Forestry/Natural Resources Skill Seminar *(1 unit lab)* The culminating course in the Forestry and Natural Resource Technology Program. Students will have an opportunity to review all the main skill and competency categories learned in all the FOR and NR courses at C/R. They will then be assessed on their skill level within each competency. The list of skills assessed will be the same ones used in all previous FOR and NR courses. Students must pass each competency assessment with a 70% or higher to move on to the next competency assessment. They will receive a Skill Level Certificate upon successful completion of this class. They will also finalize and formalize the skill portfolio they have been developing through each of the previous FOR and NR courses. *Prerequisite: All required FOR/NR courses Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

FOR-102 Wildland and Habitat Inventories *(1.5 units lecture / lab)* A course covering the identification of a variety of habitats. Topics will include aquatic, mesic, forest and other wildland habitats; methods of gathering from existing databases and other record sources. *Note: Field trips and surveys will be conducted. The College does not provide transportation. CR/NC option*

FOR-151 Trail Construction and Maintenance *(2.5 units lecture / lab)* A course in the proper and safe techniques for constructing and maintaining a trail system. Students will receive basic training in trail construction and maintenance theory. *CR/NC option*

FOR-158 Erosion Control *(3 units lecture / lab)* This course provides students with an understanding of types and processes of erosion and human causes of accelerated erosion particular to the North Coast. Emphasis is placed on hands-on experience with manual labor and biotechnical erosion control projects. *Grade Only*

French (FRNC)

FRNC-1A Elementary French *(4 units lecture)* The student will acquire French language skills which emphasize oral and written competency and communication skills at a basic level. Current French is learned in a fashion designed to introduce approximately one new concept a day which is then practiced in class, in the Learning Assistance Center and in written homework assignments designed to reinforce what was taught in the classroom. Frequent dictations test aural comprehension. A basic acquaintance with French customs will be made. *CR/NC option CSU and UC (CAN FREN2)*

FRNC-1B Elementary French *(4 units lecture)* Continuation of FRNC-1A, with continued emphasis on spoken and written French. *Prerequisite: FRNC-1A Grade Only CSU and UC (CAN FREN4)*

FRNC-2A Intermediate French *(4 units lecture)* A study in understanding, speaking, reading, and writing French at the intermediate level with emphasis on spoken French and increasing attention to reading and writing. It includes a grammar review and vocabulary expansion exercises and appreciation of the diverse French cultures. *Prerequisite: FRNC-1B or equivalent Grade Only CSU and UC (CAN FREN8)*

FRNC-2B Intermediate French *(4 units lecture)* A continuation of FRNC-2A. It includes understanding, speaking, reading, and writing French at the intermediate level with emphasis on spoken French and increasing attention to reading and writing. It expands appreciation and knowledge of the diverse French reading and writing, along with continued development in listening/speaking competencies. *Prerequisite: FRNC-2A or equivalent Grade Only CSU and UC (CAN FREN10)*

FRNC-8A Elementary Conversational French *(3 units lecture)* A study designed to develop and increase the students' oral conversational skills. Emphasis will be on deepening listening comprehension and internalization of the language. Students will be able to handle and respond to the practical aspects of life while focusing on the French cultural awareness. The course will reinforce intuition and spontaneity to facilitate the speaking abilities while expanding vocabulary and grammar skills. *Prerequisite: FRNC-1A or equivalent Recommended preparation: FRNC-1B CR/NC option CSU*

FRNC-11A Beginning Conversational French *(3 units lecture)* A beginning study in conversational French with special emphasis on pronunciation, conversational skills, and vocabulary studying. The concepts and vocabulary presented are designed to be useful to travelers in French-speaking countries. *CR/NC option CSU*

General Studies (GS)

GS-1 College Success *(3 units lecture)* This intensive course is designed to assist students in obtaining the skills and knowledge necessary to reach their educational objectives. Topics to be covered include: motivation and discipline, memory development, time management, communication skills, career planning, student skills and techniques, question asking skills, and personal issues that face many college students. *Recommended preparation: ENGL-150 or appropriate score on reading and writing placement exam Grade Only CSU*

GS-2 Strategies for Classroom Success - Learning Skills *(1 unit lecture)* Part of a series of three mini-courses designed to build both the academic and personal strengths necessary for classroom success. Specifically practical strategies for 1) assessing preparation, interests, and commitments; 2) confirming and extending the basic study skills of reading, note-taking, and test-taking to more active, critical learning; 3) forming study, support groups; and 4) managing the increasing technology necessary for information retrieval, writing, and computing required in college classes. *Grade Only CSU*

GS-3 Strategies for Classroom Success - Academic Planning *(1 unit lecture)* Part of a series of three mini-courses designed to build both the academic and personal strengths necessary for classroom success. This course specifically focuses on helping students explore career interests, values and abilities; understand career and education options; make satisfying career/education decisions; and develop an education plan designed to maximize their career success. *Grade Only CSU*

GS-4 Strategies for Classroom Success - Life Skills *(1 unit lecture)* Part of a series of three mini-courses designed to build both the academic and personal strengths necessary for classroom success. This course focuses on life skills introducing practical strategies for 1) assessing personal values; 2) examining decision-making skills; 3) managing stress; 4) managing family and other relationships in the context of being a student; and 5) understanding and appreciating the dynamics of an ethnic and gender diverse student culture. *Grade Only CSU*

GS-5 Academic Research *(1 unit lecture)* Introduction to academic research skills and practice. Students will learn how to find, evaluate, use, analyze, and correctly cite information sources in print, electronic, and Internet formats. Students will learn how to do the research required for term papers, speeches, or presentations required by transfer level courses such as English 1A or Speech 1. *Recommended preparation: ENGL-150/150L or appropriate score on reading and writing placement exam Grade Only CSU*

GS-100 College Skills *(3 units lecture)* College Skills teaches skills that allow a student to get more out of the college experience. Students also will be able to explore the resources available at CR that are designed to help them through the college experience. *Grade Only*

GS-110 College Skills and Disability Awareness *(3 units lecture)* An introduction to specialized study and learning skills that will help students with disabilities to succeed at the community college. Students will explore the resources and accommodations designed to meet their special needs and assist them through the college experience. The class is designed for students with disabilities or students interested in the fields of education that require an awareness of the needs of students with disabilities. *Grade Only*

Geography (GEOG)

GEOG-1 Physical Geography *(3 units lecture)* A study of the fundamentals of physical geography and their integrated patterns of world distribution. The emphasis of this course is on weather, climate, landforms, map interpretation, soils, and natural vegetation. *CR/NC option CSU and UC (CAN GEOG2)*

GEOG-2 Cultural Geography *(3 units lecture)* This course deals with aspects of culture including social, political and economic factors that are related to a human's perception, organization and use of the environment. Evolution of the global economy is covered along with the problems of and prospects for development of selected regions from a geographic perspective. Pacific Rim cultures are emphasized. *Grade Only CSU and UC (CAN GEOG4)*

GEOG-3F Field Geography of Northern California *(2 units lecture / lab)* A field class designed to introduce students to the many facts of geography through field trips (the College does not provide transportation) to interesting and important sites in Northern California. *Recommended preparation: GEOG-1 May be repeated to a maximum of two enrollments. CR/NC option CSU*

GEOG-125 Earthquakes *(0.5 unit lecture / lab)* An introduction to the study of earthquakes and plate tectonics utilizing the San Andreas as a model. Subjects to be covered are how earthquakes are caused, where they occur and how they affect mankind. Particular attention is paid to recognizing faults on maps, air photos and in the field and to be able to recognize and deal with hazardous situations. *CR/NC option*

Geology (GEOL)

GEOL-1 General Geology *(4 units lecture / lab)* A study of the basic principals of physical geology including the development of natural landscapes, earthquakes and volcanoes. An introduction to rocks, and minerals, plate tectonics, geologic time, landslides, folds and faults, etc. will also be covered. *CR/NC option CSU and UC (CAN GEOL2)*

GEOL-2 Historical Geology *(4 units lecture / lab)* A study of the basic principles of historical geology including evolution of continents, oceans, and mountain systems. Geologic significance of natural parks and monuments; development of earth's animal and plant inhabitants; laboratory studies of sediments, sedimentary rock, fossils and maps are also covered. *Recommended preparation: GEOL-1 Note: Field trips will frequently be taken to study local historical geology, The College does not provide transportation. CR/NC option CSU and UC*

GEOL-3 Rocks and Minerals *(3 units lecture / lab)* This course studies common rocks, important rock forming and economic minerals and considers their occurrences, associations and uses. Also studied will be minerals, crystals and gemstones and how to recognize them. Polarizers and spectroscopes are used. *CR/NC option CSU*

GEOL-9 Field Studies in Geology *(0.5 - 2 units lab)* This course is a field trip (the College does not provide transportation) to various western locales of particular geologic interest and clarity. Brief field studies at frequent intervals to demonstrate fundamental relationships of geology are included. Studies will also include maps, rocks and the geology of the field trip area. May be repeated to a maximum of four enrollments. *CR/NC option CSU*

GEOL-10 Environmental Geology *(3 units lecture)* This course deals with the study of earth materials, rocks, minerals and their structure and how they are impacted by humans. Geologic hazards and processes associated with earthquakes and faulting, volcanic activity, soils, landslides, coastal processes, ground water and fossil fuels will also be covered. *CR/NC option CSU and UC*

GEOL-15 Earthquakes and Plate Tectonics *(3 units lecture)* An investigation of plate tectonic processes and their relationships to faults, earthquake activity, mountain building, and other geological phenomena common at the western edge of the North American plate. Students will use fundamental physical science principles to understand material composi-tion, the processes of energy transmission, plate movement, and geologic changes through time. The course explores plate interactions that influence geological and societal activity, the history of earthquake activity, design of earthquake resistant structures, and earthquake preparedness. The course emphasizes the nature of scientific investigations and the uncertainties associated with predictions. *Note: Field trips may be taken to utilize seismic equipment and observe geological evidence of tectonic activity. The College does not provide transportation. Grade Only CSU and UC*

GEOL-130E Geology of the North Coast Ranges *(0.5 unit lecture / lab)* An introduction to the historical geology and landform development of the North Coast Ranges of California including important geologic structures, fossils and sedimentary and metamorphic rocks. *CR/NC option*

GEOL-130F Geology of the Clear Lake Volcanos *(0.5 unit lecture / lab)* An introduction to volcanic activity, its causes and distribution, associated rocks and minerals and resulting landforms. An all-day field trip (the College does not provide transportation) to the Clear Lake area examines volcanic features such as lava flows, cinder cones and pyroclastic deposits. *CR/NC option*

GEOL-130G Coastal Geology *(0.5 unit lecture / lab)* The nature of the coastal environment is examined in terms of landforms, resources, geologic hazards and problems. Particular attention is paid to the marine terrace landscape of Northern California, its geologic development and water resources. *CR/NC option*

German (GERM)

GERM-1A Elementary German *(4 units lecture)* This course represents an introduction to fundamental vocabulary and concepts of structure of the German language. A good understanding of the relationship between English and German will be developed. Basic idiomatic German, plus the ability to communicate in the present and past tenses with a vocabulary of about 1,000 words is emphasized as well as a good basic knowledge of everyday German culture and customs. Communication should be at the 1-2 level (ACTFL proficiency guidelines) by the end of the semester. *CR/NC option CSU and UC*

GERM-1B Elementary German *(4 units lecture)* This course represents a continuation of fundamental vocabulary as well as the concepts of structure of the German language. It emphasizes a good understanding of spoken German and an ability to read is introduced. The vocabulary consists of about 2,000 words. Skills in forming and recognizing noun and verb compounds add another 1,000 words to the vocabulary. A good knowledge of customs, some proverbs and songs are learned throughout the semester. Communication should be at the 2-3 level of ACTFL recommended proficiency at the end of the semester. *Prerequisite: GERM-1A Grade Only CSU and UC*

GERM-2A Intermediate German *(4 units lecture)* A study in understanding, speaking, reading, and writing German at the intermediate level with emphasis on spoken German and increasing attention to reading and writing. It includes a grammar review and vocabulary expansion exercises and vocabulary expansion exercises and appreciation of the diverse German cultures. *Prerequisite: GERM-1B or equivalent Grade Only CSU and UC*

GERM-2B Intermediate German *(4 units lecture)* A continuation of GERM-2A. It includes understanding, reading, and writing German at the intermediate level with emphasis on spoken German and increasing attention to reading and writing. It expands appreciation and knowledge of diverse German cultures. Course emphasis is on culturally authentic reading and writing, along with continued development of listening/ speaking competencies. *Prerequisite: GERM-2B Grade Only CSU and UC*

GERM-8A Elementary Conversational German *(3 units lecture)* A study designed to increase the students' oral communication skills in German. Emphasis will be on incorporating improved listening comprehension, expanded vocabulary, grammar skills, pronunciation and internalization of the language. *Prerequisite: GERM-1A or equivalent Recommended preparation: GERM-1B CR/NC option CSU*

GERM-11A Beginning Conversational German *(3 units lecture)* A beginning study in conversational German with special emphasis on pronunciation, speaking, and vocabulary building. The concepts and vocabulary building. The concepts and vocabulary presented are designed to be useful to travelers and to those interested in an introduction to the German language. *CR/NC option CSU*

Graphic Communications (GC)

GC-10 Introduction to Graphic Communications *(2 units lecture)* An introduction to the graphic communications program and to the printing/graphic arts industry in general. This class is designed to cover printing processes (including letterpress and offset lithography) their terminology, capabilities and limitations; graphic art areas of design/layout and composition; photoconversion; platemaking, printing and binding. *CR/NC option CSU*

GC-11 Design for Printing *(1.5 units lecture / lab)* A study of design as it relates to graphic arts and specific printed items utilizing layout and paste-up techniques. The course considers three areas in the design of printing - perception, selection and production and their relationship to communication. *Recommended preparation: GC-10 CR/NC option CSU*

GC-12 Desktop Publishing *(3 units lecture / lab)* This course is an introduction to desktop publishing which combines text and graphics to produce camera ready artwork by use of a computer, desktop publishing software and laser printer. Also covered are the basic concepts of design, word processing, typography, scanner use and graphics which students apply to hands-on projects using the latest in hardware and software. *Recommended preparation: GC-11 CR/NC option CSU*

GC-20 Graphics Business Management *(1 unit lecture)* A study of management and supervision principles particular to graphic communications businesses. Topics will include: hiring; plant layout, marketing and finances. This course will also cover the related areas of estimating, sales, filing and inventory. *Prerequisite: GC-10 Grade Only CSU*

GC-22 Commercial Design *(3 units lecture / lab)* This course is designed to develop the concepts and techniques required to originate a variety of commercially oriented projects. Emphasis will be on the practical as well as the creative aspects of design. Works will be completely processed through final printing. *Prerequisite: GC-11 Grade Only CSU*

Guidance (GUID)

GUID-8 Career Planning *(2 units lecture)* Career planning and decision making, education, work and leisure alternatives, life-styles and personal satisfaction will be discussed. *CR/NC option CSU*

GUID-10 Introduction to Peer Tutoring *(0.5 unit lab)* Course includes practical skills necessary to function as a peer tutor with training in human relation techniques, individual differences in learning styles, the importance of independence and good study habits and educational methods used to promote good learning. *CR/NC only CSU*

GUID-41 World of Work *(1 unit lecture)* A course designed to assist students in achieving career goals by teaching job-seeking skills and common factors of success on the job. Students will be introduced to the resources available to them that will help them make better career choices. Activities will include an introduction to resume writing, interviewing techniques, time management, stress control and defining and applying the work ethic. *Note: GUID-41 is required for all students enrolling in CE-41 or CE-42 for the first time. It is open to all interested students. Grade Only CSU*

GUID-47 Leadership Development *(2 units lecture)* An introduction to the study of leadership, focusing both on the academic study of leadership theories and the development of leadership skills. Additional objectives for the course include exploring diversity, utilizing college resources as a "learning laboratory" for leadership development, and exploring the intersection between community service and leadership. *Corequisite: GUID-47L CR/NC option CSU*

GUID-47L Leadership Development Lab *(1 unit lab)* A supervised lab experience designed to provide students with the opportunity to apply the theories and concepts presented in GUID-47 through a service-learning project and student government, campus clubs, or residential life. *Corequisite: GUID 47 (first semester only) May be repeated to a maximum of four enrollments. CR/NC option CSU*

GUID-300 ESL: Introduction to Academic Skills *(1 unit lecture)* This course is a bridge from Adult Education English as a Second Language (ESL) to skills needed for college level classes. Skills taught will be study skills, listening skills and note taking skills. In addition, the organization of text books and an introduction to the library will be addressed. *CR/NC option*

GUID-343 Introduction to Learning Disabilities *(0.5 unit lecture / lab)* This course is designed to provide an overview of specific learning disabilities. It will include information regarding ability, achievement, adaptive behavior, learning skills and learning disabilities as described in Title V of the California Education Code for community colleges. The use of individualized student education plans and incorporating adaptive strategies for learning disabilities will be covered. The importance of inter-personal skills for successful mainstreaming of learning disabled students is also stressed. The course is designed primarily for the learning disabled student, but is useful also to tutors, instructional aides and others who work with or are interested in the person with a learning disability. *CR/NC only*

GUID-345 Adaptive Strategies for the Learning Disabled *(0.5 - 4 units lecture / lab)* A course focusing on adaptive strategies designed for the success of a student with a learning disability or other disability. Characteristics and issues surrounding learning disability, neurological and cognitive processes, processing, advocacy and social development are all addressed both in a lecture and a lab setting. The student may select one or more sections (modules) designed to address difficulties in a specific academic area, while incorporating strategies and techniques to enhance success. Strategies to enhance auditory and visual processing, language processing and advocacy are incorporated into specific course sections with emphasis on fluid reasoning, language comprehension, basic language skills, study skills, personal development and stress reduction. Laboratory experiences focus on skill development in the respective emphasis areas to prepare students with disabilities for independence and success in college courses. Units offered may vary by semester. Consult Schedule of Classes for section information. *Prerequisite: GUID-343 May be repeated to a maximum of four enrollments. CR/NC only*

GUID-379 Introduction to Adapted Computer Use *(0.5 - 4 units lecture / lab)* Students with verifiable disabilities will be provided individualized training in adapted microcomputer hardware, software and related applications; individualized assessment to select appropriate computer applications; and keyboarding experience for adapted computer use. Units offered may vary by semester. Consult Schedule of Classes for section information. *May be repeated to a maximum of four enrollments. CR/NC only*

GUID-380 Adapted Computer Assisted Instruction *(0.5 - 4 units lecture / lab)* This course will provide disabled students with individualized adapted computer instruction to improve basic skills, cognitive processes and computer application skills. Units offered may vary by semester. Consult Schedule of Classes for section information. *May be repeated to a maximum of four enrollments. CR/NC only*

Health Education (HE)

HE-1 Health Education *(3 units lecture)* A study of personal and family health needs. Specific attention is given to the following: mental health, drugs and alcohol, pre-marriage and family, nutrition, common diseases, death and aging, consumer health, and physical fitness. *Grade Only CSU and UC*

HE-2 Critical Issues in Women's Health *(3 units lecture)* An exploration of various health issues which are directly related to female gender. The issues include cardiovascular health, women's cancers, menopause, disorders of the reproductive system, and osteoporosis. *Grade Only CSU and UC*

HE-7 Standard First Aid and Personal Safety *(2 units lecture)* Theory and practice in the techniques of administering emergency care to victims of accident or illness. Includes bandaging, splinting, transportation, an introduction to CPR, and other emergency care necessary until advanced life-support is available. This course fulfills the requirements for the American Red Cross Standard First Aid Certificate or National Safety Council. *CR/NC option CSU and UC (CAN KINE/PE8)*

HE-152 C.P.R. *(0.5 unit lecture / lab)* Provides lecture-demonstration, as well as laboratory practice in one- and two-rescuer cardiopulmonary resuscitation (CPR), infant CPR, and obstructed airway. Successful completion provides American Heart Association certification. This course is appropriate for health care providers, emergency service personnel, first responders, life guards, and forestry personnel. *CR/NC option*

Health Occupations (HO)

HO-15 Nutrition *(3 units lecture)* A study of nutritional needs across the life span, focusing on the basic nutrients (including fats, carbohydrates, protein, minerals, vitamins, water, and electrolytes), food sources, and nutrient utilization in the human body. Emphasizes nutritional needs from infancy to old age and during common life cycle occurrences such as pregnancy, lactation, menopause, immobilization, and surgery. Also includes applied and controversial aspects of human nutrition. *Grade Only CSU and UC*

HO-110 Basic Patient Care *(6 units lecture / lab)* A basic course in personal care services and the maintenance of a safe and healthful environment. Safety and asepsis are stressed. Prepares the worker to function under the direction of a Licensed Nurse in health agencies. *Prerequisite: Student must pass physical examination requirements for clinical work Note: Course completion will allow student to take state certification exam. Grade Only*

HO-115 Introduction to Health Occupations *(2 units lecture)* An introduction to concepts and issues in health care. This class will focus on socioeconomics of health care, effects of illness, safety, communication, ethical and legal frameworks, health maintenance, and career planning. *Grade Only*

HO-158 First Responder Training *(1 unit lecture / lab)* This training course is developed in accordance with state and federal guidelines for training in emergency medical care to those persons first responding to a medical emergency. This course emphasizes development of skills in patient assessment and treatment. *Recommended preparation: training in cardiopulmonary resuscitation and basic first aid. CR/NC option*

HO-159 Emergency Medical Technician I *(5 units lecture / lab)* A study of basic emergency medicine to meet State of California requirements for EMT-I certification. Students will study and practice the care of clients experiencing trauma and medical emergency conditions. The focus of care includes assessment, stabilization, treatment and transport of the critically ill and injured. This course includes ride along, patient transport experience in an ambulance service and observational experience in care of medical and traumatic conditions in an emergency setting. *Note: Must be 18 years old to be eligible for state certification. May take state certification exam within two years of course completion. Grade Only*

History (HIST)

HIST-4 Western Civilization to 1600 *(3 units lecture)* The evolution of the West from ancient Mesopotamia and Egypt through classical Greece and Rome, the Middle Ages, the Renaissance, and the era of the 16th century Protestant Reformation. *CR/NC option CSU and UC (CAN HIST2)*

HIST-5 Western Civilization: 1600- Present *(3 units lecture)* An introduction to the history of the West from the crises of the 17th Century through the end of the Cold War. Special emphasis will be placed on themes related to race, class, gender, ethnicity, religion, politics and foreign relations. The course will also introduce students to the nature of historical interpretation. *Recommended preparation: ENGL-150/150L CR/NC option CSU and UC (CAN HIST4)*

HIST-6 The Vietnam War *(3 units lecture)* An examination of the history of U.S. involvement in Vietnam. The class will provide an in-depth analysis of the years of deepest U.S. involvement, 1954-1975, and briefly cover Vietnam's early history and the origins of the Vietnamese warrior spirit in its opposition to Chinese and French domination. The aftermath of U.S. involvement will be examined as relates to veterans, refugees, and the present states of former French Indochina. The course will also introduce students to the nature of historical interpretation by examining sources written during the historical time period investigated in the class. *Recommended preparation: ENGL-150/150L CR/NC option CSU and UC*

HIST-7 History of Modern Asia *(3 units lecture)* A survey of the political, social and cultural history of the Asian Pacific Rim countries from 1800 to the present, with emphasis on their relations with Europe and the United States. The course examines the impact of Western culture on China, Japan and other selected areas of East and Southeast Asia and these countries' involvement in the international community. The major political movements of the 20th century, nationalism and communism, are studied. *Recommended preparation: ENGL-150/150L Grade Only CSU and UC*

HIST-8 U.S. History to 1877 *(3 units lecture)* An exploration in the history of the United States from the original inhabitants of the North American continent to the end of the Reconstruction period after the American Civil War. Of special importance is how the social, political, diplomatic, cultural, gender, ethnic, and economic relations and institu-tions changed over time. The course will also introduce students to the nature of historical interpretation and how to interpret sources written during the historical time periods investigated in the class. *Recommended preparation: ENGL-150/150L Grade Only CSU and UC (CAN HIST 8)*

HIST-9 U.S. History Since 1877 *(3 units lecture)* An exploration in the history of the United States from the end of the Reconstruction period after the Civil War to the present. Of special importance is how the social, cultural, political, diplomatic, gender, ethnic, and economic relations and institutions changed over time. The course will also introduce students to the nature of historical interpretation and how to interpret sources written during the historical time periods investigated in the class. *Recommended preparation: ENGL-150/150L Grade Only CSU and UC (CAN HIST 10)*

HIST-11 History of Women in America: Pre-Contact To 1877 *(3 units lecture)* An in-depth historical study of the social, cultural, political, and economic developments in the United States from the perspective of the American woman, from the period just prior to European contact through the end of Reconstruction. Special emphasis is placed upon the varying ways in which women of diverse classes, races, and ethnicities have both contributed to and been affected by the larger historical patterns in American history. The course will introduce students to the nature of historical interpretation, enable students to interpret sources written during the historical time periods investigated in the class, and familiarize students with gender related issues in the American past. *Recommended preparation: ENGL-150/150L Grade Only CSU and UC*

HIST-12 History of Women in America: 1877 - Present *(3 units lecture)* An in-depth historical study of the social, cultural, political, and economic developments in the United States from the perspective of the American woman, from the end of Reconstruction to the present day. Special emphasis is placed upon the varying ways in which women of diverse classes races, and ethnicities have both contributed to, and been affected by, the larger historical patterns in American history. The course will introduce students to the nature of historical interpretation, enable students to interpret sources written during the historical time periods investi-gated in the class, and familiarize students with gender related issues in the American past. *Recommended preparation: ENGL-150/150L Grade Only CSU and UC*

HIST-18 History of California *(3 units lecture)* This course surveys the economic, social, political, and cultural developments in California history from the first European explorations to the present. *CR/NC option CSU and UC*

Industrial Technology (IT)

IT-25 Occupational Safety and Health Management *(3 units lecture)* A study of the principles and practices of safety in the workplace. Coverage includes the components of safety programs plus federal and state laws/ standards enacted to improve the safety of workers, the work-place, and the environment. *Prerequisite: ENGL-150 Recommended preparation: IT-62 or MATH-105/106 Grade Only CSU*

IT-31 Industrial Business Management *(3 units lecture / lab)* This course will cover the decision-making process, tools of decision-making, the acquisitions and organization of the factors of production. Also, covered will be managing the organized business, and the influence of change on the business organization and management. Students will learn how to use credit, equipment, and labor in an efficient way. *Grade Only CSU*

IT-46 Computers in Industrial Management *(3 units lecture / lab)* Application of the microcomputer to the management of industrial and commercial operations and businesses. Topics will include computer integrated management of contracts and accounts, materials, work processes, and personnel. *Recommended preparation: CIS-1 & CIS-1L Grade Only CSU*

IT-60A Basic Manufacturing Blueprint Reading *(3 units lecture)* This course will cover blueprint reading for the metals field which will include the symbols and interpretation necessary to construct, machine, and inspect machined parts and assemblies. Also covered, will be the necessary mathematical calculations for decimals, fractions, and right triangle measurements. In-depth coverage of the geometric dimensioning system with emphasis on calculations of maximum (MMC) and minimum material condition (LMC) as they relate to manufacturing processes is also included. *CR/NC option CSU*

IT-60B Basic Manufacturing Blueprint Reading *(3 units lecture)* Continuation of blueprint reading for the manufacturing field, especially machined parts. This course expands the terminology and basic techniques acquired in IT-60A to interpretation of advanced blueprints using authentic blueprints from industry. *Prerequisite: IT-60A Grade Only CSU*

IT-62 Technical Mathematics *(3 units lecture)* Course includes simple equations, basic, algebraic addition, subtraction, multiplication, division factoring, development, and calculation of algebraic work problems. Also covers calculation of basic geometric plan and solid figures, trigonometric right and oblique triangles as they apply to the technician. *Prerequisite: IT-161 or MATH-105/106 Grade Only CSU*

IT-120 Technical Writing and Documentation *(3 units lecture)* A study of writing successful documents for service or goods-producing industries. Topics include foundations of technical writing, technical writing process, and forms of technical writing and speaking such as reports, proposals, instructions, memoranda, and correspondence. *Prerequisite: ENGL-350 or appropriate placement Grade Only*

IT-150 Technical Assistance Lab *(1 unit lab)* A lab course which will increase the student's awareness of mathematical, scientific, and industrial computation and technical problem-solving as related to manufacturing and industry. *Corequisite: IT-161 or IT-62 May be repeated to a maximum of two enrollments. CR/NC option*

IT-152 Technical Computer Applications Lab *(0.5 - 2 units lab)* A course enabling students to become proficient in using computer application packages specific to their area of study. Technical computer applications subject areas include: agriculture, aquaculture, automotive, cooperative education, construction, diesel, drafting, electronics, family life, food service, forestry, graphic communications, industrial, machine tool and welding. *Note: Enrollment in a course involving computer skills. Units offered may vary by semester. Consult Schedule of Classes for section information. May be repeated to a maximum of four enrollments. CR/NC option*

IT-161 Technical Mathematics *(3 units lecture)* Extensive association of applied technical industrial word problems in reference to ratios, factoring of number systems, common multiples, algebraic word problems. Also covers calculation equation substitution with the application of signed numbers, root extrapolation, and shortcut methods. Also an introduction to literal numbers and formulas. Basic algebraic expressions and operations are covered as they apply to the vocational areas. *Prerequisite: MATH 375/376 Grade only*

Interdisciplinary Studies (IDS)

IDS-2 Special Topics in Humanities *(3 units lecture)* An exploration of ideas and issues in the field of humanities. The course content is thematic in nature and is organized around a single topic which may vary from year to year. Topics may include conceptions of human nature, political theory, ethical notions, religion, the arts, the impact of science on society and new attitudes toward home, work and the human community. *May be repeated to a maximum of three enrollments. CR/NC option CSU*

IDS-3 Hispanic Cultures and Societies: A Quest for Identity *(3 units lecture)* A survey of Hispanic cultures and societies from the pre-colonial period to the present. This course examines the history, culture, and religious expressions of various Latin American regions and explores the presence of the Latin American peoples in the United States and their contributions to this country. *CR/NC option CSU and UC*

Italian (ITAL)

ITAL-1A Elementary Italian *(4 units lecture)* A beginning course in Italian. Instruction in understanding, speaking, reading and writing Italian with an emphasis on speaking and pronunciation. *Note: This course is designed to fulfill the foreign language requirement at state colleges and universities. CR/NC option CSU and UC*

ITAL-1B Elementary Italian *(4 units lecture)* A continuation of ITAL-1A, with continued emphasis on speaking and communication and further instruction in understanding, reading, and writing Italian. *Prerequisite: ITAL-1A Grade Only CSU and UC*

Japanese (JPN)

JPN-1A Elementary Japanese *(4 units lecture)* An introduction to the Japanese language and culture. This course will provide the beginning student with a basic knowledge of the language: its phonetic and grammatical structures. Emphasis will be placed on speaking, listening, writing, and reading the two Japanese syllabic systems (Kana), plus the introduc-tion of Chinese characters (Kanji). *CR/NC option CSU and UC*

JPN-1B Elementary Japanese *(4 units lecture)* A study designed to provide the continuing beginning student with a working knowledge of elementary Japanese, including phonetic and grammatical structures. Emphasis will be placed on speaking, listening, writing, and reading Japanese syllabary and the introduction of more Chinese characters (Kanji) *Prerequisite: JPN-1A Grade Only CSU and UC*

JPN-8A Elementary Conversational Japanese *(3 units lecture)* Practice designed to develop and increase the students' oral conversational skills. Emphasis will be on deepening listening comprehension, pronunciation, and speaking abilities by expanding vocabulary and grammar skills. The course reinforces spontaneity and intuition as natural response while immersing the students in the Japanese culture. *Prerequisite: JPN-1A or equivalent Recommended preparation: JPN-1B CR/NC option CSU*

Journalism (JOURN)

JOURN-1 Beginning Reporting *(3 units lecture)* This course will introduce students to the role of media in society, enable them to recognize news, learn basic newswriting and feature writing styles, identify and discuss ethical considerations that go into news gathering and reporting. Students also will evaluate news sources, teach and practice news gathering methods, interviewing techniques, library and records research, statistics and demographics in news, and ethics of relationships with news sources. *Grade Only CSU*

JOURN-2 Newspaper Practice *(4 units lecture / lab)* This course, under faculty supervision, produces the student newspaper. *May be repeated to a maximum of four enrollments. Grade Only CSU*

JOURN-3 Newspaper Practice *(0.5 unit lab)* Participation in the production of the student newspaper on a part-time basis. *May be repeated to a maximum of four enrollments. Grade Only CSU*

JOURN-4 Writing for Publication *(3 units lecture / lab)* This course provides for the development of marketable writing through identification and analysis of market demands. Use of writer's guidelines from various publications, the creation of initial contact inquiries to publishers, development of photographic and other illustrations to accompany stories, research, interview techniques, the creative process to develop story ideas, copyright law, critical thinking, and writing modes and styles are emphasized. The creation of on-campus publications (brochures, broadsides, publicity stories, etc.) provides opportunities to be published. *Corequisite: ENGL-1A or ENGL-150 Grade Only CSU*

JOURN-5 Introduction to Mass Communications *(3 units lecture)* An introduction to the history, purpose and methods of print and electronic media. Issues involving social, political and technological impacts on mass communication will be studied through exploration of newspapers, magazines, film, television, computers and emerging technologies. *Grade Only CSU and UC*

Legal (LEGL)

LEGL-41 Introduction to Law and the Legal System *(3 units lecture)* An introduction to the study of law including the development of the common-law system and the legislative and judicial process. The course covers court structure; jurisdiction, distinctions among civil, criminal and administrative procedures; and an introduction to substantive law and selected constitutional issues. Litigation risk-management techniques are applied. *Grade Only CSU*

LEGL-42A Legal Research and Writing I System *(3 units lecture)* An introduction to the basic tools of legal research in California law. Students learn to locate authority relevant to selected legal issues. This skill is applied to writing clear and concise basic pleadings, motions, briefs, and memoranda employing the IRAC (issue, rule, analysis, conclusion) legal-analytical formula. *Grade Only CSU*

LEGL-42B Legal Research and Writing II System *(3 units lecture)* A second-semester course in intermediate legal research and writing. The course expands and refines the legal assistant's ability to implement legal research, analytical and writing skills. Introduction to computerized legal-data search. *Prerequisite: LEGL-42A Recommended preparation: CIS-1 and 1L Grade Only CSU*

LEGL-143 Contracts and Restitution *(3 units lecture)* A general overview of contract and restitution law. Students learn what constitutes a contract, defenses to enforceability at law and equitable remedies. The course focuses on developing practical skills required of legal assistants and application of litigation risk-management techniques. *Grade Only*

LEGL-144 Enterprise Law *(3 units lecture)* An introduction to the structure of sole proprietorships, partnerships, limited-liability companies, and corporations. The course focuses on problems of formation, management, control, securities, capitalization, taxation, dividends, reorganization, agency relationships, fiduciary duties, ultra vires acts, and dissolution. Litigation risk-management techniques are applied where appropriate. *Grade Only*

LEGL-145A Civil Procedure I *(3 units lecture)* Survey of the civil-litigation process in California courts. The course covers primary jurisdiction, venue, service of process, pretrial demurrers and motions, pleadings, amended pleadings, joinder, concurrent jurisdiction, introduction to discovery and document form and content. Selected federal-litigation practices are reviewed. *Grade Only*

LEGL-145B Civil Procedure II *(3 units lecture)* A second-semester course in discovery devices and strategies. The course covers information gathering and indexing as applied to requests and demands for admission and inspection, interrogatories, oral and video depositions, physical and mental examinations, expert- witness consultations, and business-records examination. *Recommended preparation: LEGL-145A Grade Only*

LEGL-146 Family Law *(3 units lecture)* An overview of the substantive and procedural aspects of California family-law practice. The course covers adoption, annulment, legal separation, dissolution, paternity, abuse, and community property. Students learn to draft dissolution pleadings and marital settlement agreements. Litigation risk-management techniques are applied where appropriate. *Grade Only*

LEGL-147 Wills and Trusts *(3 units lecture)* An overview of the fundamental principles of the law of wills and trusts including simple will and simple living trust forms. A brief introduction to the organization and jurisdiction of estate administration including gift, inheritance, and estate taxes. Selected ethical considerations are addressed and litigation risk-management techniques are applied where appropriate. *Grade Only*

LEGL-148 Tort Law *(3 units lecture)* A broad overview of tort law including intentional torts, negligence, strict liability and defenses. The course also covers evaluation and appraisal of personal-injury lawsuits and exemplary damage claims. Litigation risk-management techniques are applied where appropriate. *Grade Only*

LEGL-151 Bankruptcy Law and Procedures *(3 units lecture)* An overview of federal bankruptcy law and procedures: how bankruptcy court functions; debtor, creditor, trustee, and attorney rights and obligations; voluntary bankruptcy and wage-earner plans; Chapter 7; schedules preparation. *Grade Only*

LEGL-153 Mediation *(2 units lecture / lab)* An introduction to techniques of mediation used to resolve legal disputes without lawyers. Students develop mediation techniques through a study of issue-focused analysis and fundamental doctrines of fairness. The course presents a non- judicial, common-sense alternative to litigation. *CR/NC option*

LEGL-155 Law Practicum *(1 unit lab)* Pro bono law-related work experience in courts, law offices, government agencies, legal-aid societies, or mediation centers. Seminars address field experiences, legal ethics, and professional responsibility. *May be repeated to a maximum of four enrollments. Grade Only*

LEGL-157 Child Support Specialist *(4 units lecture)* Introduction to the California welfare system, skip tracing (investigations), family-support computer-specific software, judgment enforcement (collection procedures), client-interviewing, and documenting and summarizing client interviews. Selected public-relations challenges and safety challenges typically encountered by Family Support Officers are addressed. *Recommended preparation: LEGL-146 Grade Only*

Licensed Vocational Nursing (LVN)

LVN-110A Pharmacology - Vocational Nursing I *(2 units lecture)* Introduces the principles of pharmacology, pharmacodynamics, pharmacokinetics, pharmacotherapeutics, and the legal, cultural, psychological, and ethical aspects for vocational nurses in the administration of medications. The course also clarifies the nurse's responsibilities for the administration of drugs to adult and geriatric clients. LVN-110 includes the nursing implication for the following major classification of drugs: diuretics and electrolytes; cardiac glycosides; sedatives; hypnotics; narcotic and non-narcotic analgesics; CNS stimulants; anti-infectives; integumentary agents; steroidal anti-inflammatory drugs; anesthetics; antiseptics; vaccinations and immunology agents; gastrointestinal (PT I); insulins and oral hypoglycemics; vitamins and minerals; and oxygen therapy. The role of the vocational nurse within RN-established nursing process guidelines and client education programs will be delineated and integrated throughout the course. Substance abuse and misuse by clients and professionals will also be addressed, as will over-the-counter agents. *Prerequisite: HO-110 with grade of "C" or better or CNA certification or equivalent Recommended preparation: ENGL-150 Grade Only*

LVN-110B Pharmacology - Vocational Nursing II *(2 units lecture)* Provides a continuation of legal, ethical, and cultural aspects for vocational nurses in the administration of medications, and the nurse's responsibilities for the administration of drugs to adult, obstetric, and pediatric clients, and the nursing implications for the following major classification of drugs; antianginals, antiarrythmic agents, antihypertensives, anticoagulants, peptic ulcer agents, enteral and parenteral nutrition; diagnostic agents; other endocrine agents, female and male reproductive agents, autonomic nervous system drugs, anticonvul-sants, respiratory drugs, anti-tuberculin agents, antihyperlipidemics, antiparkinsonian agents, chemotherapeutic agents, and psychotherapeutic agents. Over-the-counter agents will continue to be addressed. *Prerequisite: LVN-110A & LVN-121 or equivalent Corequisite: LVN-122 Recommended preparation: ENGL-150 Grade Only*

LVN-111 Pharmacology Skills - Vocational Nursing *(0.5 unit lab)* Beginning pharmacology skills stressing accuracy in fundamental measurements, conversions, and calculations of drug administration throughout the lifespan. The course provides simulated practice in the safe and accurate administration of oral, topical, and parenteral medications (except intravenous administration). The course emphasizes the role of the licensed vocational/practical nurse in medication administration. *Prerequisite: HO-110 with grade of "C" or better or equivalent Corequisite: LVN-110A and enrollment in LVN program May be repeated to a maximum of two enrollments. Grade Only*

LVN-114 Anatomy, Physiology and Microbiology For Vocational Nursing *(3 units lecture / lab)* An introduction to the principles of human structure and function with emphasis on the interrelation-ships of the various systems and the human organisms as an integrated whole. The course also covers the function of microorganisms and their role in disease processes. Lab work emphasizes human structure and function in health and disease as well as study of microorganisms with an introduction to laboratory methods of identification and to principles of asepsis. *Note: Open to non-majors. Grade Only*

LVN-118 Psychology for Vocational Nursing *(2 units lecture)* An exploration of the meaning of mental health. Students will learn how to gather and assess information relevant to the mental health status of clients. In addition, they will apply concepts of mental health and communication to patient care. *Prerequisite: HO-110 better or CNA certification or equivalent Grade Only*

LVN-121 Nursing of Adults and Children I *(7.5 units lecture / lab)* An introduction in the care of adults and children for vocational nursing students. Topics include: nursing role of the LVN; LVN responsibilities in the application of the nursing process; legal/ethical responsibilities; health care delivery systems and facilities; nursing organizations; perioperative nursing; care of the terminally ill; nursing care of clients experiencing loss and grief; care of cancer patients receiving chemotherapy, radiation therapy, or surgery; bedside emergency nursing care of patients with infectious diseases; and care of the geriatric patient throughout the course with emphasis on developmental tasks and problems of the elderly. Etiology, symptoms, treatment, and nursing care of patients with common disorders of the integumentary and musculosketetal systems are covered. Application of skills and concepts takes place in the clinical lab and acute care facilities. *Prerequisite: HO-110 (or CNA certification); student must pass physical examination requirements for clinical practice Corequisites: LVN-114 LVN-111 LVN-110A Grade Only*

LVN-122 Nursing of Adults and Children II *(13 units lecture / lab)* A study of nursing care of adults and children with disorders of the neurosensory, hematologic, cardiopulmonary, male reproductive, endocrine, and genitourinary systems. Topics include: etiology, symptoms, treatment and nursing care of patients with disorders of these systems. The role of the LVN inpatient care and assisting with the nursing process is emphasized. Consideration of professional, legal and ethical issues is interwoven with the medical-surgical content of the course. Current changes in the health care system are considered in relationship to the future role of the LVN in various health care settings. There is clinical experience in acute care facilities. *Prerequisite: LVN-121, student must pass physical examination requirements for clinical practice Corequisite: LVN-110B Grade Only*

LVN-123 Nursing of Adults and Children III *(16 units lecture / lab)* A study of: (1) adult and pediatric nursing, (2) maternal-child nursing, and (3) leadership/ management skills. Topics include growth and development of infants, children, and adults; care of adults and children with disorders of the gastro-intestinal, female reproductive system, hepatic, and pancreatic systems; care of children with communicable diseases; care of mothers and infants during the normal childbearing process; supervision and leadership skills of the LVN; professional roles, the licensing process; and regulations governing LVN practice. There is concurrent clinical experience in acute and long term care facilities. *Prerequisite: LVN-118, LVN-122, HO-15; student must pass physical examination requirements for clinical practice Grade Only*

Manufacturing Technology (MT)

MT-52 Ferrous Metallurgy *(3 units lecture / lab)* A study of ferrous metals as they are used in industry. Phase and isothermal transformation diagrams are covered in relation to experiments in heat treating. The class takes the student on a study of metals from the ore state to manufacturing a product. Students participate in specimen heat-treating, etching, polishing, and micro-scopic examination. *CR/NC option CSU*

MT-54A Numerical Control Machining *(4 units lecture / lab)* Introduction to numerical controlled machining, including its application, control units, type of machine tools, positioning, tape and tape processing equipment. Instruction is given in manual operation of SLO-SYN control unit and basic programming for point to point and continuous path operations. Operation of Bridgeport Series I computer numerical control vertical mill with Boss 8 control is also included. *Recommended preparation: MT-62A Grade Only CSU*

MT-54B Computer Number Control Machining *(4 units lecture / lab)* Computer numerical control programming, setup and operation of Bridgeport Series I mill with Boss 8 control, and computer numerical control programming, set up, and operation of Mori-Seiki/ Yasnac lathe. *Prerequisite: MT-54A Grade Only CSU*

MT-54C 4 & 5 Axis C.N.C. Machining *(4 units lecture / lab)* A study of the fundamentals of 4 & 5 axis computer numerical control machining using Haas and Matsuura, 5 axis machining centers with Mastercam multiaxis programming. *Prerequisite: MT-54B and MT-59B or equivalent Grade Only CSU*

MT-54L Numerical Control Lab *(2 units lab)* This course covers numerical controlled machining including its application, control units, type of machine tools, positioning, tape, and tape processing equipment. Instruction is given in manual operation of SLO-SYN control unit and basic programming for point to point and continuous path operation. Students will operate the Bridgeport Series I computer numerical control vertical mill with Boss 8 control and Mori-Seiki/ Yasnac lathe. *Prerequisite: MT-54B May be repeated to a maximum of four enrollments. Grade Only CSU*

MT-55 Electrical Discharge Machining *(2 units lecture / lab)* A study of the principles and application of electrical discharge machining including tooling materials, electrodes, and necessary calculations. Other types of electrical machining are also covered. *Recommended preparation: MT-62A Grade Only CSU*

MT-56 Wire Electrical Discharge Machining *(4 units lecture / lab)* The fundamentals of 4 & 5 axis wire electrical discharge machining. Die cutting applications, tapers, finishes, spark gaps, voltage and amperage settings for different wire sizes and cutting speeds will be used to determine machine settings. *Prerequisite: MT-55 and MT-59A or equivalent Grade Only CSU*

MT-59A MasterCAM 2-D Programming *(4 units lecture / lab)* This course covers numerical controlled machining including its application, control units, type of machine tools, positioning, tape, and tape processing equipment. Instruction is given in manual operation of SLO-SYN control unit and basic programming for point to point and continuous path operation. Students will operate the Bridgeport Series I computer numerical control vertical mill with Boss 8 control and Mori-Seiki/ Yasnac lathe. *Recommended preparation: MT-54A or DT-25 Grade Only CSU*

MT-59B MasterCAM 3-D Programming *(4 units lecture / lab)* A continuation of MT-59A MasterCAM 2-Dimensional Programming. This course will provide instruction in 3-dimensional programming using MasterCAM to create derived and composite surfaces and toolpaths for wireframe and surface models. *Prerequisite: MT-59A Grade Only CSU*

MT-60A Machine Tool Technology *(6 units lecture / lab)* MT-60A introduces or reviews operations at the bench, the associated mechanical hardware, skills, and essential lathe awareness that sets the true journeyman machinist apart from the rest. Class will provide many ideas and skills that can be applied to the art of manufacturing. *Grade Only CSU*

MT-60B Machine Tool Technology *(6 units lecture / lab)* MT-60B combines the areas of lathe operation and grinding machines along with technical informa-tion of each, to machine parts with precision as required by industry. The course may be taken by the beginner or the person possessing basic machine shop skills, learning methods of increasing their productiveness in today's machine shop or manufacturing plant. MT-60B begins with a review of basic lathe operations and progresses into additional operations on the lathe, including extensive instruction in taper turning, threading, and analysis of special set ups. *Grade Only CSU*

MT-61A Machine Tool Technology *(6 units lecture / lab)* An in-depth study of milling machine practices intended for persons preparing for machine tool occupations. The course presents modern state-of-the-art concepts and practices required and used by modern manufacturing. Class involvement requires the application of theory and manipulation of machines to complete projects related to milling machine operations such as: general and rotary milling, precise boring, indexing, and gear machining. *Grade Only CSU*

MT-61B Machine Tool Technology *(6 units lecture / lab)* A study of high efficiency machining using carbides on the lathe and milling machine. The study of carbides examine carbide styles, materials, and sizes as well as insert holders that can be applied to specific machining of part location-part holding, and tool grinding are presented with emphasis on economy coupled with machinability rating and estimating. *Grade Only CSU*

MT-62A Machine Shop Procedures *(3 units lecture / lab)* Introduction to use of equipment and technical information associated with machining, building, and repair of common hardware in today's mechanical environment. Beginning with basic concepts to improve knowledge and skills towards a better understanding of techniques of repair-maintenance or open a pathway to an occupation in the field of manufacturing. *Grade Only CSU*

MT-62B Machine Shop Procedures *(3 units lecture / lab)* The B section of Machine Shop Procedures is designed to provide technical information and manipulative application related to machine shops and performance of their required tasks. Jobs completed in this course are a continuation of the skills and information presented in MT-62A. *Prerequisite: MT-62A Grade Only CSU*

MT-62L Machine Shop Procedures *(1 - 2 units lab)* This course is designed as a continuation of machine shop procedures, allowing additional laboratory experience in the setup and operation of various machine tools. *Prerequisite: MT-62B Note: Units offered may vary by semester. Consult Schedule of Classes for section information. May be repeated to a maximum of four enrollments. Grade Only CSU*

Mathematics (MATH)

MATH-3 Fortran Programming *(3 units lecture / lab)* An introduction to the Fortran programming language with emphasis on programming for scientific, mathematical and engineering applications. *Recommended preparation: MATH-25 (or equivalent) with a "C" grade or better Note: No prior experience with computers or programming is assumed. Grade Only CSU and UC*

MATH-4 Matlab Programming *(3 units lecture)* An introduction to programming in Matlab, with emphasis on programming for scientific, mathematical, and engineering applications. *Recommended preparation: MATH-50A Note: No prior experience with computers or programming is assumed. Grade Only CSU*

MATH-5 Contemporary Mathematics *(3 units lecture)* A study of mathematical concepts that include inductive and deductive reasoning, mathematical modeling and analysis of linear, quadratic, exponential, and logarithmic functions, transformation of functions, geometric symmetries, sequences and series, dynamics of population growth, statistics, mathematics of finance, and problem solving techniques that include a variety of practical problems. This course is primarily designed for liberal art students. *Prerequisite: MATH-120 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-5 or 15 Note: A graphing calculator will be required. Grade Only CSU (CAN MATH2)*

MATH-15 Elementary Statistics *(4 units lecture)* An emphasis in the use of statistical methods as applied to descriptive statistics and inferential statistics. While discussing descriptive statistics, the students learn to read, understand, and present data in a well organized way by use of frequency distribution, graphs, percentiles, measures of central tendency, measures of variability, correlations, and linear regression. While discussing inferential statistics, the students learn to make generalizations about a population based upon a sample using probability and its laws, and several parametric and non-parametric tests including t, chi-square, ANOVA, Wilcoxon Rank Sum, Kruskal- Wallis Test, Sign, and others. Computers will be used for statistical projects. Reading and writing skills at or above the ENGL-150 level are strongly recommended. A several page written term project will be assigned. *Prerequisite: MATH-120 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-5 or MATH-15. Recommended preparation: ENGL-150 Note: Graphing calculators are required. TI-83 + recommended. Grade Only CSU and UC (CAN STAT2)*

MATH-21 Finite Math *(3 units lecture)* An introduction to the methods of finite mathematics with an emphasis on systems of equations, matrices, linear programming, and the use of Markov chains in decision making. *Prerequisite: MATH-120 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-5 or 15 Note: Graphing calculators are required. Grade Only CSU and UC*

MATH-22 Business Calculus *(4 units lecture)* An introduction to basic matrix operations and probability, and differential and integral calculus. This course also studies functions, limits, derivatives, integrals and their applications. *Prerequisite: MATH-120 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-22, 25 or 30 Recommended preparation: MATH-30 Note: Graphing calculators are required. Grade Only CSU and UC (CAN MATH34)*

MATH-25 College Trigonometry *(4 units lecture)* A study of trigonometric functions, cofunctions, solution of right triangles, use of a graphing calculator, solution of trigonometric identities, radian measure, circular functions, graphs of the trigonometric functions, double- and half-angle functions, conic sections oblique triangles, laws of sines and cosines, the inverse trigonometric functions, complex numbers in trigonometric form, and De Moivre's Theorem. *Prerequisite: MATH-120 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-22, 25, or 30 Note: Graphing calculators are required. Grade Only CSU (CAN MATH8)*

MATH-30 College Algebra *(4 units lecture)* A course covering first-degree and absolute value equations and inequalities; composite and inverse functions; polynomial, rational, exponential, and logarithmic functions; systems of equations and inequalities; matrices; sequences and series; mathematical induction; binomial expansion theorem; and complex numbers. *Prerequisite: MATH-120 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-22, MATH-25, or MATH-30. Note: Graphing calculators are required on the Eureka campus. Grade Only CSU and UC*

MATH-45 Linear Algebra *(4 units lecture)* A study of the use and application of matrices in the solution of systems of linear equations, determinants, vector spaces, linear transformations, eigenvalues, and eigenvectors. Linear algebra is a core course in many engineering, physics, mathematics and computer science programs. Computers will be used extensively in this course. *Prerequisite: MATH-25 and MATH-30 (or the equivalent) with a "C" grade or better Note: Graphing calculators are required. Grade Only CSU and UC (CAN MATH26)*

MATH-50A Calculus I *(4 units lecture)* A study of the derivatives and the integrals of algebraic, transcendental and trigonometric functions. Applications of the derivative include maximum and minimum problems, science applications and graphing of functions and derivative functions. A variety of integral applications will be studied. Writing to learn and group activities are used to develop communication skills in a technical environment. *Prerequisite: Both MATH-25 and MATH-30 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-50A. Note: Graphing calculators are required. Grade Only CSU and UC (CAN MATH18)*

MATH-50B Calculus II *(4 units lecture)* A study of transcendental functions, their inverses, and the respective derivatives and integrals. Included are series and sequences, techniques of integration, and analytic geometry. Topics encompass applications of integration, indeterminate forms, improper integrals, convergent and divergent infinite series, power series, Taylor and MacLaurin series, and conic sections with analytical geometry. *Prerequisite: MATH-50A (or the equivalent) with a "C" grade or better. Note: A graphing calculator is required. Grade Only CSU and UC (CAN MATH20)*

MATH-50C Calculus III *(4 units lecture)* A study of vectors in two and three dimensions, vector-valued functions, polar coordinate systems, derivatives and integrals of functions of more than one variable, and an introduction to vector fields. Topics include the vector product, spherical coordinate systems, partial derivatives, multiple integrals, LaGrange multipliers, and line integrals. *Prerequisite: MATH-50B (or the equivalent) with a "C" grade or better. Note: Graphing calculators are required. Extensive computer visuali-zation using Matlab is integrated in the course. Grade Only CSU and UC (CAN MATH22)*

MATH-55 Differential Equations *(4 units lecture)* A study of differential equations and solutions, equations of first order and degree, linear differential equations, operational methods, systems of equations, existence theorems, series solutions, and applications. *Prerequisite: MATH-50B (or the equivalent) with a "C" grade or better. Note: Graphing calculators will be used extensively. Grade Only CSU and UC (CAN MATH24)*

MATH-102 Elementary Algebra Review *(0.5 unit lecture)* A review of Elementary Algebra concepts. Students will review evaluating, simplifying and solving many different kinds of expressions and equations. They will review graphing techniques and basic geometry. Students will use a variety of techniques to solve word problems. This class will help to prepare students for the Elementary Algebra Assessment Test, which is used to place students into MATH-120. *Note: Calculators will not be used. CR/NC only*

MATH-103 Intermediate Algebra Review *(0.5 unit lecture)* A review of Intermediate Algebra concepts. Students will review techniques for simplifying and solving expressions and equations that involve polynomial, rational, logarithmic and exponential expressions. This class will help to prepare students for the Intermediate Algebra Assessment Test, which is used to place students into MATH-5/15/21/22/25/30. *Note: Calculators are not used, as they are not allowed on the exam. CR/NC only*

MATH-105 Elementary Algebra *(4 units lecture)* A course which studies numbers and sets, first-degree equations and inequalities, absolute value, factoring, graphs, systems of equations, radicals, quadratic equations, and the quadratic formula. *Prerequisite: MATH-375 or 376 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-105 or 106 Note: Calculators will be used extensively. Grade Only*

MATH-106 Elementary Algebra *(5 units lecture)* A study of the real number system, first degree equations and inequalities, polynomial expressions and equations, graphs of linear equations and inequalities, systems of linear equations, radicals, the quadratic formula, rational expressions and equations, interpretation of graphs, problem-solving techniques, similar triangles, and the Pythagorean Theorem. Small group work, exploratory activities, and computer use are involved in this course. *Prerequisite: MATH-375 or 376 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-105 or 106 Note: Graphing calculators are required (TI-83 Plus recommended.) Grade Only*

MATH-110 A Survey of Geometry *(1 unit lecture)* A study of points, lines, angles, polygons, triangles, right triangles, congruent triangles, parallel lines, quadrilaterals, area, volume, similarity, circles, truth tables and Venn diagrams. *Prerequisite: MATH-105 or 106 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-120 Note: Calculators will be used extensively. Grade Only*

MATH-115 Math Confidence *(1 unit lecture)* A study of psychological and mathematical skills that will help students at various levels to successfully complete mathematics courses and courses in related areas. *CR/NC only*

MATH-120 Intermediate Algebra *(4 units lecture)* Covers first-degree and absolute value equations and inequalities; composite and inverse functions; polynomial, rational, exponential and logarithmic functions; and systems of equations and inequalities. *Prerequisite: MATH-105 or 106 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-120 Note: Scientific calculators are required. Graphing calculators are required on the Eureka campus. Grade Only*

MATH-152 The Math Lab *(0.5 - 2 units lab)* Facilitation for students enrolled in math classes needing individual assistance for specific mathematics problems. *May be repeated to a maximum of four enrollments. CR/NC only*

MATH-371 Arithmetic for the College Student *(3 units lecture)* A review of addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals. Applications include ratio, proportion, and percent. *Prerequisite: Completion of the assessment process CR/NC option*

MATH-372 Arithmetic for the College Student *(4 units lecture)* A study of addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals, including the use of calculators. The arithmetic skills are used for applications of ratio, proportion and percent to business and consumer problems. Analysis of statistical data includes graphs, means, and medians. Introductory geometry topics include U.S. Customary Measurements, perimeter, and area. Problem solving, estimation, and the communication of mathematical ideas are an integral part of the course. *Prerequisite: Completion of the assessment process CR/NC option*

MATH-375 Pre-Algebra *(3 units lecture)* A review of addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals. Applications include ratio, proportion, and percent. Also included are topics from geometry and an introduction to algebra. *Prerequisite: MATH-371 or MATH-372 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-375 or MATH-376 Note: Calculators will be used extensively. CR/NC option*

MATH-376 Pre-Algebra *(4 units lecture)* A review of basic computation and estimation using whole numbers, fractions, and decimals with an emphasis on study skills and communication skills. Students will learn to compute with signed numbers, solve problems involving ratio, proportion, percent and geometry using a variety of techniques. Students will simplify expressions, solve equations, and graph linear equations. Small group work, exploratory activities and computers are involved in this course. *Prerequisite: MATH-371 or MATH-372 (or the equivalent) with a "C" grade or better or the assessment recommendation for MATH-375 or MATH-376. Note: Calculators will be used extensively. CR/NC option*

Medical Assisting (MA)

MA-152 Medical Terminology *(3 units lecture)* This course covers the basic structure of medical words, including prefixes, suffixes, roots, and combining forms. It includes the study of pronunciation, spelling, and definitions of medical terms. Anatomical, pathological, and surgical terminology and related diagnostic tests are related to the body's systems. *Note: Course is open to non-majors. Grade Only*

MA-155 Medical Assisting I *(7.5 units lecture / lab)* Orients students to the role of the Medical Assistant. Students will study the history of medicine, law and ethics, medical asepsis and safety. Students will also study administrative medical assistant responsibilities such as appointment, registration, medical records and introduction to insurance billing. Students will be introduced to basic clinical skills in the skills laboratory: patient assessment, vital signs, patient positioning, and assisting with physical examinations. *Prerequisite: MATH-375/376 with "C" grade or better or eligibility for MATH-105/106 on MATH Assessment Test and ENGL-350 with "C" grade or better or eligibility for ENGL-150 on ENGL Assessment Test Corequisite: MA-152 Grade Only*

MA-162 Medical Transcription *(0.5 unit lecture / lab)* A course which applies stenographic skills to transcribing medical reports. Covers career opportunities, report formats, use of reference aids, ethics, and legal aspects. *Prerequisite: MA-152 Note: Typing speed and accuracy assumed as is knowledge of punctuation. Grade Only*

MA-165 Medical Assisting II *(8.5 units lecture / lab)* An expansion upon the theory and skills acquired in MA-155. Students will study pharmacology and administration of drugs, certificate-of-waiver laboratory procedures, handling of medical emergencies. Assisting with minor office surgeries and specialty procedures and testing are covered. Students will also study and practice therapeutic diets and nutrition, patient education techniques, and handling of medical office emergencies. A significant portion of this course is spent in the campus skills laboratory and in local medical offices. *Prerequisite: MA-152 and MA-155 Grade Only*

Meteorology (METEO)

METEO-1 Introduction to Meteorology *(3 units lecture)* An introductory course which will study the atmosphere, pressure, temperature, humidity, precipitation, solar radiation, air mass origins and movements, fronts, cyclones and anticyclones, thunderstorms, charts, the general circulation, and climatic influences in our civilization. *CR/NC option CSU and UC*

Music (MUS)

MUS-1 Introduction to Music *(3 units lecture)* A course in the fundamentals of music structure. Basic piano and recorder instruction, simple music composition, survey of music styles and instruments, and concert reports are included. *Grade Only CSU and UC*

MUS-2 Beginning Music Theory *(3 units lecture)* An introduction to harmony and musical form. Topics addressed include intervals, chords and their inversions, roman numeral analysis, part- writing, melodic construction and musical form. *Recommended preparation: MUS-1 Grade Only CSU and UC*

MUS-3 Intermediate Music Theory *(3 units lecture)* An intermediate course in harmony and musical form. Topics addressed include modulation, chromatic harmony, modality, and various 20th-century techniques. The course includes keyboard applications, ear-training, and student compositions. *Prerequisite: MUS-2 Grade Only CSU and UC*

MUS-10 Music Appreciation *(3 units lecture)* A survey of music styles from ancient to modern times. Students will gain an understanding of the general characteristics and terminology relative to each historical period and an ability to recognize the styles of representative composers. *CR/NC option CSU and UC*

MUS-12 American Popular Music *(3 units lecture)* A survey of American popular music from the beginning of the twentieth century to the present. Includes American popular song and musical theatre; the African-American tradition from spirituals and work songs through the blues and jazz; the Anglo-American tradition (country and western, bluegrass, urban folk); and rock music from c. 1955 to c. 1990. The course which includes lectures, films, recordings, and live presentations, explores American popular music both as an art form, worthy of study for its own aesthetic ends, and as a social phenomenon. Concert/record reviews and an oral report are included in the class requirements. *Grade Only CSU and UC*

MUS-14 Music of the Whole Earth *(3 units lecture)* A survey of the dominant musical cultures of the world with comparisons to Western traditions. Course includes lectures, films, recordings, live presentations, and experimental techniques to explore how music is used around the world for aesthetic, inner awareness, and social purposes. An oral report and original instrument project are included in the class requirements. *Grade Only CSU and UC*

MUS-22 Beginning Instruments *(1 unit lecture / lab)* Class instruction in the fundamentals of playing clarinet, flute, saxophone, oboe, bassoon, trumpet, trombone, French horn, baritone, tuba, snare drum, bass drum, timpani, cymbals, and miscellaneous percussion instruments. *May be repeated to a maximum of four enrollments. Grade Only CSU and UC*

MUS-23 Introduction to Conga Drumming and African Polyrhythms *(1 unit lecture / lab)* Hands-on introduction to the techniques and strokes of the conga drum with exercises and concepts in African rhythms and polyrhythms. Students learn six traditional African drum pieces from Nigeria, Ghana, Congo, and Cuba, along with exercises that enhance coordination, timing, and listening. Students also learn to play rattles, bells, and blocks that accompany these rhythms. Background cultural information pertaining to the geography, history, religion, and social conditions of the region will also be covered. *May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

MUS-25A Beginning Class Piano *(1 unit lecture / lab)* Instruction in piano at the beginning level utilizing an electronic keyboard system. Course will include basic note reading, ensemble experience, chord development, and improvisation. *Grade Only CSU and UC*

MUS-25B Beginning Class Piano *(1 unit lecture / lab)* Continued study of beginning piano to include note reading, ensemble experience, chord development, and improvisation. *Prerequisite: MUS-25A Grade Only CSU and UC*

MUS-25C Intermediate Class Piano *(1 unit lecture / lab)* Introduction in piano at the intermediate and advanced level utilizing the electronic keyboard system. Will include ensemble experience, chord development, and improvisation. *Prerequisite: MUS-25B Grade Only CSU and UC*

MUS-25D Intermediate Class Piano *(1 unit lecture / lab)* Continued study of intermediate piano to include experience, chord development, and improvisation. *Prerequisite: MUS-25C Grade Only CSU and UC*

MUS-26 Beginning Class Voice *(1 unit lecture / lab)* A group instruction course at the beginning level in the development of solo voice techniques. Breathing techniques, stage presence, and projection is discussed in a variety of musical styles. Students are required to practice a minimum of four hours outside of class per week. *May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

MUS-27 Intermediate Class Voice *(1 unit lecture / lab)* A group instruction course at the intermediate level. Emphasis is placed on further development of solo voice techniques, practice skills, and critical ability using various musical styles. Students are required to practice a minimum of four hours outside of class per week. *Prerequisite: MUS-26 May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

MUS-29 Folk Guitar *(1 unit lecture / lab)* A group instruction course in folk guitar which will include tuning, strumming, chord playing, fingering techniques, and fundamental music notation. *May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

MUS-30 Classical Guitar *(1 unit lecture / lab)* Group instruction in classical guitar which will include study of notes on individual strings, ensemble playing techniques, and music fundamentals. *May be repeated to a maximum of two enrollments. Grade Only CSU and UC*

MUS-37A Beginning Jazz Improvisation *(1 unit lecture / lab)* Group instruction and practice in the basic techniques of improvisation. Utilizing the modal approach, basic scales, rhythm patterns, and melodic devices are explored. Starting with simple forms, class eventually moves into repertoire used by the professional musician. *Grade Only CSU and UC*

MUS-37B Beginning Jazz Improvisation *(1 unit lecture / lab)* Group instruction and practice in the basic techniques of improvisation. Further explora-tion of modes, scales, rhythms, and melodic devices will be included. Class materials include music of contemporary jazz artists. *Prerequisite: MUS-37A Grade Only CSU and UC*

MUS-38A Intermediate Jazz Improvisation *(1 unit lecture / lab)* Group instruction and practice in the intermediate techniques of improvisation. Rhythmic resources are covered with considerable emphasis on the repertoire as used by the contemporary jazz musician. *Prerequisite: MUS-37B Grade Only CSU and UC*

MUS-38B Intermediate Jazz Improvisation *(1 unit lecture / lab)* Continued study and practice in the intermediate techniques of improvisation. Modal and rhythmic resources are covered with emphasis on jazz repertoire. *Prerequisite: MUS-38A Grade Only CSU and UC*

MUS-42 Music Ensemble *(0.5 - 1.5 units lecture / lab)* A course in small ensemble performance and the social context of various kinds of music. The music may be chamber music in the European classical tradition, jazz, or music from other cultures, such as: Africa, China or Latin America. Students will conduct outside research, listening and practice assignments. The classical and jazz options require prior instrumental performance skills. *Prerequisite: Instrumental performance ability Note: Units offered may vary by semester. Consult Schedule of Classes for section information. May be repeated to a maximum of four enrollments. Grade Only CSU and UC*

MUS-44 Opera Production *(2 units lecture / lab)* The study and performance of a particular operatic musical work with appropriate accompaniment, costumes, makeup, lighting, and scenery. *Prerequisite: Vocal performance ability May be repeated to a maximum of three enrollments. CR/NC option CSU and UC*

MUS-57 Chamber Singers *(1 unit lab)* The study and performance of choral selections from all periods as appropriate to small ensemble sound. Course will include vocal techniques, historical perspectives, music fundamentals and solo techniques. Some dance movement will be included. *May be repeated to a maximum of four enrollments. Grade Only CSU and UC*

MUS-59 Chorale *(1 unit lecture / lab)* The study and performance of choral selections from the Classical and Romantic periods. Course will include vocal techniques, historical perspectives, and music theory. *Prerequisite: MUS-26B May be repeated to a maximum of four enrollments. Grade Only CSU and UC*

MUS-62 Jazz Orchestra *(1 unit lab)* The Jazz Orchestra is an advanced level performing ensemble which focuses on the repertoire of the big band era. *May be repeated to a maximum of four enrollments. Grade Only CSU and UC*

MUS-63 Activity Band *(1 unit lab)* The study and performance of literature conducive to an outdoor performing environment. The course will include a heavy emphasis on sight reading with numerous performances at local community parks. *May be repeated to a maximum of four enrollments. Grade Only CSU and UC*

MUS-70 Oratorio Choir *(0.5 - 2 units lab)* This course is the study and rehearsal of oratorio literature culminating in public performance. Appropriate style including ornamentation will be emphasized. *Prerequisite: vocal performance ability Note: Units offered may vary by semester. Consult Schedule of Classes for section information. May be repeated to a maximum of four enrollments. CR/NC option CSU and UC*

MUS-100 Songwriting *(1 unit lecture / lab)* Introduction to the techniques of writing marketable songs, including song structure, the effective use of images and language, setting lyrics to music, and developing lyrical and musical "hooks." The lecture portion of this course will focus on analysis of popular songs in different genres, showing fundamental elements of song structure and techniques of developing material. Laboratory will be concerned with writing songs in both group and individual sessions. *Grade Only*

MUS-100L Songwriting Lab *(0.5 unit lab)* A concentration on the development of songwriting skills. Students will participate in a number of indivi-dual and group assignments that cover a variety of songwriting techniques. *Prerequisite: MUS-100 May be repeated to a maximum of four enrollments. CR/NC option*

Native American Studies (NAS)

NAS-1 Introduction to Native American Studies *(3 units lecture)* A survey of contemporary and historical issues pertaining to Native American societies and cultures which makes use of traditional academic disciplines such as philosophy, history, anthropology, sociology, art, and literature. The course also introduces a uniquely Native American world view and explores potential contributions of such a perspective to society. *Grade Only CSU and UC*

NAS-13 Native Cultures of Northwestern California *(3 units lecture)* Traditional values compared to contemporary values of the Yurok, Karuk, Hupa, Weott, and Tolowa cultures will be studied by examining economics, geography, folklore, medicine, sexual behavior, arts, and belief systems. Comparisons among the above groups will be studied in addition to other native American cultures, especially those of the extreme Pacific Northwest. *CR/NC option CSU and UC*

NAS-21 Native American History *(3 units lecture)* A survey of Native American History from pre-Columbian times through the present. The histories of specific tribes will be examined in order to illustrate broad historical dynamics and how those dynamics inform contemporary position and treatment of Native Americans. This course will examine the impacts of politics, the law, and culture on the American Indian in U.S. history. *Grade Only CSU and UC*

Natural Resources (NR)

NR-52 Introduction to Surveying *(4 units lecture / lab)* A basic introduction to Plane surveying concepts and practices. Techniques for measuring both vertical and horizontal distances will be covered using pacing and steel tapes along with clinometers and Abney Levels. Angles, bearings, and azimuths will be measured with compasses. Leveling will be done using both direct and indirect techniques with Dumpy and Auto levels and level rods. Closed and open traverses will be run using both transits and total stations. Computations from field data will be done by hand and with computers. Topographic map reading and measuring skills will be covered. Formal maps will be produced using both hand and computer techniques. GIS (geographic information systems) and GPS (global positioning systems) will be introduced and used in field exercises. *Prerequisite: IT-161 or MATH-106/106 or equivalent Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

NR-54 Natural Resource Measurements *(3 units lecture / lab)* The study of the concepts and practices involved in measuring natural resources for inventory and management purposes. Map reading will be covered, along with measuring distances and directions on the ground and on maps and aerial photographs. Students will learn basic sampling techniques along with measurement techniques and procedures used in wildlife, watershed, and recreation situations. Equipment used will include cloth and steel tapes, diameter tapes, Abney Levels, clinometers, Biltmore sticks, hand and staff compasses, increment borers, relaskops, densiometers, GPS receivers, electronic data collectors, and more. Data analysis will be done by hand and on computers. *Recommended preparation: FOR-1 and IT-161 or MATH 105/106 Grade Only CSU*

NR-57 Route Surveying *(2 units lecture / lab)* The basic concepts and techniques of locating, laying out, designing, and preparing roads and trails for construction. Road locations will be flagged to specific grade requirements, and students will collect data on directions, elevations, and cross sections. That data will then be used to design the road, calculating cut and fill volumes required at each station, along with vertical and horizontal curve locations. The designed road will then be staked for construction. Culvert locations and water movement over the road will be considered. *Prerequisite: NR-52 Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

NR-58 Introduction to Photogrammetry and Remote Sensing *(2 units lecture / lab)* Measurement of land areas, boundaries, elevations, and tree heights from aerial photographs. Includes the practices and principles of interpreting aerial photographs, with emphasis on forest typing, mapping, and inventory. Remote Sensing principles and images will be introduced with an emphasis on interpretation and classification. *Recommended preparation: FOR-1 and IT-161 or MATH-105/106 Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

NR-65 Introduction to GIS *(3 units lecture / lab)* An introduction to the use of Geographic Information Systems software to produce a database of digitized and inventory information that can be used to create computer generated maps, charts, and graphs showing relationships between different variables in the database. The course will focus on natural resource data and mapping, and will utilize the ESRI ArcView software. Students will learn how to operate the software, to input data into the computer using digitizing tablets, and to create maps to be plotted and printed showing different resource relationships. Basic GPS operation will also be introduced. *Recommended preparation: CIS-1/1L Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

NR-66 Advanced Arcview and GPS *(4 units lecture / lab)* An in-depth analysis and practice of advanced GIS (Geographic Information Systems) concepts using ESRI ArcView software needed to develop and maximize spatial and attribute data for the production of computer-generated maps, charts, and graphs. Students will learn to effectively create and edit shape files and import data from AutoCAD, CPS, and the Internet. The ESRI Spatial Analyst extension in ArcView will be covered in-depth. The basic concepts of GPS (global positioning systems) will be covered, along with data collection, differential correction, and data export into GIS. *Prerequisite: NR-65 Grade Only CSU*

NR-68 Introduction to ARCGIS *(4 units lecture / lab)* An in-depth analysis and practice of advanced GIS concepts, using ESRI ArcGIS software, needed to develop and maximize spatial and attribute data for the production of computer generated maps, charts, and graphs. The collection and analysis of GPS data and its application in GIS will be covered. ArcMap, a module of ArcGIS, will be introduced. *Prerequisite: NR-65 or previous ArcView experience Grade Only CSU*

NR-80 Watershed Management *(3 units lecture / lab)* A study of how water resources are managed on forest land and factors that affect water quality and quantity and movement through the hydrologic cycle. *Recommended preparation: AG-17 and FOR-1 Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

NR-87 Wildlife Ecology/Habitat Inventory *(3 units lecture / lab)* Explores and address the history of wildlife ecology and the current situations relating to the management of wildlife resources with regards to natural resource and forestry projects. Students will be introduced to the methodologies of wildlife habitat inventory and learn techniques for monitoring and tracking specific species. *Recommended preparation: FOR-1 Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

NR-91 Public Relations and Personal Management In Natural Resources *(2 units lecture)* A study of the importance of using good communication skills in dealing with the public and co-workers. The course is broken down into two main parts-using public relations in forestry and natural resources to educate the public and to develop support for management policies and practices, and using interpersonal skills in human relations to work well with others in your organization and to supervise effectively. The prepara-tion of a resume and effective interview skills will also be covered. *Note: Field trips are required. The College does not provide transportation. Grade Only CSU*

NR-100 Field Experience: Applied Natural Resource Technology *(2.5 units lecture / lab)* An integration of natural resource conservation principles and supervised fieldwork experience. Students learn natural resource conservation skills that target watershed enhancement and restoration practices at a technical level while working in a crew setting. *May be repeated to a maximum of two enrollments. Grade Only*

NR-120 Field Studies in Natural History *(3.5 units lecture / lab)* A field study of the natural history of selected wilderness areas. Course will include the geography, botany, geology, and human history of each area. Students will also be exposed to the history of the American conservation movement and learn about the conservation ethic. *Grade Only*

NR-185 Introduction to Natural Resources Conservation *(1 unit lecture)* This course is an exploration of earth's resources and the conservation of these resources. Through lectures, demonstrations, video tapes, and other techniques, the instructor will lead students to an understanding of their role in preserving and replacing the renewable resources. *Grade Only*

Nursing (NURS)

NURS-10A Pharmacology in Professional Nursing - I *(2 units lecture)* An introduction to pharmacology in the practice of nursing that incorporates the legal, cultural, psychological, professional, and ethical aspects of medication administration to adult and geriatric clients. Nursing process guidelines and client education programs will be delineated and integrated throughout the course. *Prerequisite: RN Program Admission Corequisite: NURS-21, 51 Grade Only CSU*

NURS-10B Pharmacology in Professional Nursing-II *(2 units lecture)* A continuation of legal, ethical, and cultural aspects in the administration of medications, and the nurse's responsibility for developing a comprehensive approach in the administration of drugs to adult, obstetric, and pediatric clients. *Prerequisite: NURS-10A, 21, and 51 Corequisites: NURS-22 NURS-52 NURS-11 Grade Only CSU*

NURS-11 Pharmacology Skills *(1 unit lab)* An advanced pharmacology skills class for RN and LVN to RN upgrade students providing simulated practice in the safe and accurate administration of intravenous medication administration. Accuracy in complex medication measurements, conversions, and calculations throughout the lifespan is emphasized. *Prerequisite: NURS-10A, NURS-21, NURS-51 Corequisites: NURS-10B NURS-22 NURS-52 Recommended preparation: LVN licensure for the LVN to RN Upgrade Option May be repeated to a maximum of two enrollments. Grade Only CSU*

NURS-21 Nursing Science and Practice I *(7 units lecture / lab)* An introduction to the major concepts of client, environment, health and the art and science of nursing basic to developing a caring, collaborative relationship in nursing practice. Theory and clinical emphasis is based upon individualized, holistic nursing care of clients with commonly occurring medical/ surgical conditions having predictable outcomes. Concurrent clinical experiences occur in the nursing skills lab and in acute and long-term care facilities. *Prerequisite: Enrollment in the RN Program Corequisites: NURS-51 NURS-10A Grade Only CSU*

NURS-22 Nursing Science and Practice II *(8 units lecture / lab)* A focus on the development and application of nursing process in the collaborative holistic care of individual and family clients across the life- span experiencing commonly occurring physiological and pathophysiological conditions with predictable and unpredictable outcomes. Concurrent clinical experiences occur with medical, surgical, pediatric, maternal-child, and community settings. *Prerequisite: NURS-10A, 21, 51 Corequisites: NURS-52 NURS-10B NURS-11 Grade Only CSU*

NURS-23 Nursing Science and Practice III *(8 units lecture / lab)* A focus on the application of the nursing process in the collaborative, holistic care of groups of individual and family clients with serious and complex pathophysiological and psychological conditions with predictable and unpredictable outcomes. Concurrent clinical experiences occur in acute care facilities, psychiatric settings, and community placements. *Prerequisite: NURS-10B, 11, 22, 52. Corequisite: NURS-53 Grade Only CSU*

NURS-24 Nursing Science and Practice IV *(10 units lecture / lab)* A synthesis of the major concepts of the client, environment, health, holism, and the art and science of nursing essential to enhancing a caring collaborative relationship in nursing practice. Nursing management and leadership of other health care workers are incorporated with the provision and management of care of clients with complicated and critical pathophysiological conditions. Concurrent clinical experiences in acute, long- term care facilities and community settings. *Prerequisite: NURS-23 and 53; Enrollment in the RN Program Grade Only CSU*

NURS-41 Supplemental Work in Nursing *(0.5 - 4 units lecture)* Directed classroom study in nursing with frequent student-instructor interaction. The focus of study will vary with each student's identified needs. Limited to students who need portions of a nursing course. *Prerequisite: eligibility for Nursing course as determined by portfolio assessment May be repeated to a maximum of three enrollments. Grade Only CSU*

NURS-42 Supplemental Clinical Nursing *(0.5 - 3 units lecture)* A supervised and directed clinical study in the practice of nursing in hospitals and community agencies. Limited to students who need an identified clinical portion of a nursing course. *Prerequisite: eligibility for Nursing course as determined by portfolio assessment May be repeated to a maximum of three enrollments. CR/NC only CSU*

NURS-51 Nursing Skills I *(2 units lab)* An introduction to the roles and responsibilities of the nurse in administering basic nursing skills that complements NURS-21 and NURS-10A theory. Principles of infection control, teaching and learning, client comfort, communication, and documentation are incorporated in the provision and management of care of individual clients with a focus on basic care needs, drug calculation, and non intravenous medication administration. *Corequisites: NURS-21 NURS-10A May be repeated to a maximum of two enrollments. Grade Only CSU*

NURS-52 Nursing Skills II *(1 unit lab)* A continuation of the roles and responsibilities of the nurse in administering intermediate skills that complements NURS-22, NURS-10B, and NURS-11 theory. The basic principles from NURS-51 are expanded for the provision and management of care of individuals and families across the lifespan with a focus on childbearing and commonly occurring pathophysiology. *Prerequisite: NURS-51 or equivalent Corequisites: NURS-10B NURS-22 NURS-11 May be repeated to a maximum of two enrollments. Grade Only CSU*

NURS-53 Nursing Skills III *(1 unit lab)* The summation of the roles and responsibilities of the nurse in executing advanced and complex nursing skills that complements NURS-23 theory. Principles are developed further for the provision of care to meet immediate and long-term care needs and to include client support systems and other health team members in the management of individual and group client situations with a focus on serious and complex pathophysiology. *Prerequisite: NURS-22, NURS-52, NURS-10B, NURS-11 Corequisite: NURS-23 May be repeated to a maximum of two enrollments. Grade Only CSU*

NURS-60 LVN to RN Transition Concepts *(2 units lecture)* Exploration of practice concepts related to role transition for the Licensed Vocational Nurse seeking to upgrade to Registered Nurse licensure including but not limited to role theory, nursing process, nursing care plan development, critical thinking, client teaching, pharmacology, leadership, legal ethical issues, family centered and holistic nursing. Students will be introduced to the ASN curriculum model, student's role and responsi-bilities, and program policies. *Grade Only CSU*

Oceanography (OCEAN)

OCEAN-10 Introduction to Oceanography *(3 units lecture)* A survey of the oceans as a unique physical environment. It is aimed at understanding how this environment influences marine plants and animal life. Topics included are marine geology and continental drift; ocean circulation as waves, tides, and currents; food production in the oceans. *Grade Only CSU and UC*

OCEAN-11 Lab in Oceanography *(1 unit lab)* An exploration of the conceptual material presented in OCEAN-10. Students will acquire practical laboratory and field experience in many oceanographic skills, tests, and procedures. Laboratory exercises will focus on chart reading and navigational skills, basic measurements of seawater chemistry, and other processes. Field experience will include examination of coastal geology, wave and beach processes, and marine organisms and habitats. *Prerequisite: OCEAN-10 or Corequisite: OCEAN-10 Note: This course utilizes field trips. The College does not provide transportation. Grade Only CSU and UC*

OCEAN-12 Environmental Oceanography *(3 units lecture)* A study of the fundamental principles of oceanography and the resources available from the sea. The basic concepts of physical, chemical, geologic and biological oceanography will be supported by discussions on marine mineral resources, ocean energy. living resources of the sea, marine pollution and ocean management. *Grade Only CSU and UC*

Philosophy (PHIL)

PHIL-1 Critical Thinking *(3 units lecture)* Critical thinking provides specific techniques and tools whereby we can avoid basic errors in our own thinking and detect them in the thought of others. In this course, students will be given the opportunity to learn these techniques and apply them to a wide range of human interests. *Prerequisite: ENGL-1A Grade Only CSU and UC*

PHIL-10 Introduction to Philosophy *(3 units lecture)* This course examines the basic questions that have always faced human kind: Does God exist? What is right/good? Does life have meaning? PHIL-10 will study the answers ancient and modern philosophers provided to these questions. Emphasis is on the application of these to the student's life. *Grade Only CSU and UC (CAN PHIL2)*

PHIL-12 Logic *(3 units lecture)* A study of arguments, the uses of deductive and inductive reasoning, and an analysis of the role of logic in contemporary society. *Prerequisite: ENGL-1A Recommended preparation: MATH-105/106 Grade Only CSU and UC (CAN PHIL6)*

PHIL-15 Religions of the World *(3 units lecture)* This class takes the position that to understand the people of the world necessitates the study of their religion. This class surveys the origins of religion and its major expressions such as Buddhism, Islam, Judaism, Christianity, Hinduism, and others. *Grade Only CSU and UC*

PHIL-20 Ethics *(3 units lecture)* This course is an examination of morality. The course focuses on current issues and events and examines how we respond to moral issues and problems both as individuals and as a society. *CR/NC option CSU and UC (CAN PHIL4)*

Physical Education (PE)

PE-6 Aqua Calisthenics *(0.5 – 1 unit lab)* This course is designed as an aquatic calisthenics conditioning program for students to realize improvements in muscle/joint flexibility, cardiovascular endurance, and muscular toning. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-7 Step/Aerobics *(0.5 – 1 units lab)* This course is designed as a conditioning program for students to realize measurable improvement in muscle/joint flexibility and cardiovascular endurance. Students will also learn how to calculate target heart rates and recovery rates. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-8A Beginning Golf *(0.5 – 1 unit lab)* This course emphasizes basic skills, rules and etiquette of golf. *Note: Equipment is provided by the college; no additional equipment is needed. May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-8B Intermediate Golf *(0.5 – 1 unit lab)* This course continues to emphasize golf skills, rules and etiquette. It is designed to assist the student in developing their golfing skills. *Prerequisite: PE-8A Note: All equipment is provided by the college; no additional equipment is needed. May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-10 Aerobic Fitness and Running *(0.5 - 1 unit lab)* This course emphasizes the value of cardio-vascular fitness and muscle tone for the active and not so active student. The class is designed for men and women of all ages and levels of physical fitness. Variable 0.5-1 unit, 2-3 lab hours per week. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-11 Tennis *(0.5 - 1 unit lab)* This course teaches the student all aspects of tennis skills including the forehand, backhand, serve, volley, lobs, and overhead. Emphasis is placed on safety factors, rules of tennis, etiquette, and strategy for singles and doubles play. Variable 0.5-1 unit, 2-3 lab hours per week. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-12 Weight Training *(0.5 - 1 unit lab)* A physical education course for the development of the body with the use of weights. Universal weight machines, dumbbells, fixed weights, and Olympic weights are used. Olympic weights are used by those who demonstrate knowledge of proper weight lifting skills. Variable 0.5-1 unit, 2-3 lab hours per week. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-14 Defensive Tactics *(0.5 - 1 unit lab)* A course to learn protection against unarmed persons or those armed with dangerous and deadly weapons. Demonstrations and drills in holds and come-alongs will be given. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-16 Women's Self-Defense and Aerobics *(2 units lecture / lab)* Introduction to a full spectrum of self-defense. Rape awareness and prevention education, assertiveness skills, and physical self-defense techniques are taught and practiced. A low impact aerobic workout provides the repetition necessary to master the physical fighting skills. *Note: This course is open to men and women of all fitness levels. May be repeated to a maximum of two enrollments. CR/NC option CSU*

PE-17 Aerobic Kickboxing *(0.5 - 1 unit lab)* A study of the techniques of kickboxing and martial sports as the basis for aerobic exercise and strength training. Basic kicking, punching, and blocking techniques will be taught as well as footwork and combinations. The focus is on aerobic fitness, safe execution of kicks and punches, balance, flexibility, coordination, and timing. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-20 Baseball *(1 unit lab)* This course emphasizes the fundamentals of hitting, fielding, base running, team offense and defense, pitching and catching. The course is designed for students of all skill levels. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-21 Basketball *(0.5 - 1 unit lab)* This course emphasizes the fundamentals of individual and team play. It is designed for all levels of play. Students will be divided into skill level groups. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-22 Soccer *(0.5 - 1 unit lab)* This course is designed to improve the basic physical skills and technical knowledge of the sport of soccer and to create an interest in the participation in this activity as a way to obtain lifelong interest and physical conditioning. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-23 Softball *(0.5 - 1 unit lab)* This course is designed to teach the basic skills of softball. Students will learn individual skills as well as the fundamentals for team play. Strategy and rules will be stressed. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-24 Touch Football *(0.5 - 1 unit lab)* This course is designed to teach the fundamental skills of touch football which include running, passing, receiving, blocking, and defending against the pass. Team offensive and defensive strategies will be discussed. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-25 Volleyball *(0.5 - 1 unit lab)* A course emphasizing the rules, basic fundamentals, strategy and team play in volleyball. Open to all skill levels. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-33 Aerobic Dance *(0.5 - 1 unit lab)* This course is designed to include a combination of the basic principles of cardiovascular exercise with balance, rhythm, and a broad range of body movement. The principles of aerobic efficiency and heart rate monitoring will be emphasized. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-41A Beginning Swimming *(0.5 – 1 unit lab)* Instruction for non-swimming students to gain proficiency in the elementary forms of swimming. a beginning swimmer will learn to float on back, swim in deep water, overcome fear, correct breathing problems, and swim across pool. *Note: PE-41A is repeatable in combination with PE-41B, 41C, and 43 to a maximum of four enrollments. CR/NC option CSU*

PE-41B Intermediate Swimming *(0.5 - 1 unit lab)* Instruction of students in the proficiency skills of intermediate swimming, endurance, and proper body mechanics which will facilitate smooth, efficient performance and increased appreciation of swimming. *Prerequisite: PE-41A Note: PE-41B is repeatable in combination with PE-41A, 41C, and 43 to a maximum of four enrollments. CR/NC option CSU*

PE-41C Advanced Swimming *(1 unit lab)* Instruction for the advanced swimmer emphasizing swim conditioning, skill advancement, and life- saving techniques. *Prerequisite: PE-41B Note: PE-41C is repeatable in combination with PE-41A, 41B, and PE-43 to a maximum of four enrollments. CR/NC option CSU*

PE-43 Aquatic Fitness *(0.5 - 1 unit lab)* This course will help to teach cardiovascular conditioning and fitness by using the competitive aspects of swimming and specifically designed scaled workouts to fit each ability level. *Prerequisite: PE-41A Note: PE-43 is repeatable in combination with PE-41A, 41B, and 41C to a maximum of four enrollments CR/NC option CSU*

PE-44 Water Polo *(0.5 - 1 unit lab)* A course emphasizing the fundamental skills of individual and team play of water polo. It is designed for all levels of play. Students will be divided into skill level groups. *Prerequisite: Must be able to swim at the intermediate level May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-46 Lifeguard Training *(2 units lecture / lab)* Training which will provide the student with a Lifeguard Training Certificate, CPR for the Professional Rescuer, and First Aid Certification, Community Water Safety Certification, and Certificates for Head Lifeguard and Waterfront Lifeguard, which qualifies participants as non-surf lifeguards. *Note: This training should be supplemented with training by the employer which is specific to the facility. Students must demonstrate proficiency in front crawl, back crawl, breast stroke, sidestroke, elementary backstroke and underwater swimming. CR/NC option CSU and UC*

PE-47 Water Safety Instructor (WSI) *(3 units lecture / lab)* Training designed to certify the student to teach infant and preschool aquatic lessons, Longfellow's Whale Tales educational program and progressive swimming courses (Level I - VII). The student will be familiar with safety training for swim coaches, Waddles Aquacktic Safety, and be certified to work in other Red Cross instructional programs through the instructor Candidate Training module (ICT). *Note: Students must demonstrate proficiency in front crawl, back crawl, breaststroke, sidestroke, elementary backstroke and underwater swimming. CR/NC option CSU and UC (CAN KINE/PE 10)*

PE-50 Intercollegiate Baseball *(2 units lab)* A course designed to provide the student with competitive baseball experience on the intercollegiate level. *Note: Must meet all eligibility requirements of State Athletic Code for participation. May be repeated to a maximum of two enrollments. CR/NC option CSU*

PE-51 Intercollegiate Basketball - Women *(0.5 – 2 units lab)* A course designed for those interested in participating in competitive basketball at the intercollegiate level. It offers opportunities for students to receive advanced level instruction and training in basketball skills, techniques, strategies, and leadership. *Note: must meet all eligibility requirements of State Athletic Code for participation. May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-52 Intercollegiate Basketball - Men *(0.5 – 2 units lab)* A course designed for those interested in participating in competitive basketball at the intercollegiate level. It provides opportunities for students to receive advanced level instruction and training in basketball skills, techniques, strategies, and leadership. *Note: must meet all eligibility requirements of State Athletic Code for participation. May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-53 Intercollegiate Cross-Country *(2 units lab)* A course providing the student with competitive cross-country experience at the intercollegiate level. *Note: Must meet all eligibility requirements of State Athletic Code for participation. May be repeated to a maximum of two enrollments. CR/NC option CSU*

PE-54 Intercollegiate Football *(2 units lab)* A course designed for students interested in competing in intercollegiate football. It provides the opportunity for students to receive advanced instruction and training in the skills, techniques and strategies required for intercollegiate football. *Note: Must meet all eligibility requirements of State Athletic Code for participation. May be repeated to a maximum of two enrollments. CR/NC option CSU*

PE-55 Intercollegiate Golf *(2 units lab)* Provides an opportunity for students to receive advanced-level instruction in golf skills, strategies, and leadership necessary for participating in competitive golf at the intercollegiate level. *Note: Intercollegiate competition requires advanced skills equal to or better than those developed in PE-8A. Must meet all eligibility requirements of State Athletic Code for participation. May be repeated to a maximum of two enrollments. CR/NC option CSU*

PE-56 Intercollegiate Softball *(2 units lab)* A course providing the student with competitive women's softball experience on the intercollegiate level. *Note: Must meet all eligibility requirements of State Athletic Code for participation. May be repeated to a maximum of two enrollments. CR/NC option CSU*

PE-57 Intercollegiate Track and Field *(2 units lab)* A course providing the student possessing special skills and talents a competitive track and field experience on the intercollegiate level. *Note: Must meet all eligibility requirements of State Athletic Code for participation. May be repeated to a maximum of two enrollments. CR/NC option CSU*

PE-58 Intercollegiate Volleyball *(2 units lab)* A course providing the student with competitive women's volleyball experience on the intercollegiate level. *Note: Must meet all eligibility requirements of State Athletic Code for participation. May be repeated to a maximum of two enrollments. CR/NC option CSU*

PE-59 Intercollegiate Soccer - Women *(2 units lab)* Advanced-level instruction for women interested in participating in competitive inter-collegiate soccer. *Note: Must meet all eligibility requirements of State Athletic Code for participation. May be repeated to a maximum of two enrollments. CR/NC option CSU*

PE-60 Foundations of Recreational Studies *(3 units lecture)* A course covering the development of the recreational field, evaluation of current programs and interpretation of recreation as a valid form of community activities. The role of the professional in various settings is identified. *Grade Only CSU*

PE-61 Recreational Leadership *(3 units lecture)* An introduction to the dynamics of leadership in recreation programs. Emphasis is on developing and establishing a definition of leadership and management and the identification of organizational structures. The role of the recreation leader in working with groups and techniques for motivation, communication and problem solving are included. Trends and issues confronting recreation leaders for the future are explored. *Grade Only CSU*

PE-64 Concepts of Weight Training *(3 units lecture)* A course covering the scientific basis of weight training with an emphasis on designing weight training programs. Upon completion, the student will be able to understand how the body responds and adapts to weight training. *Grade Only CSU*

PE-65 Introduction to Physical Education *(3 units lecture)* An introduction to Physical Education and Recreation and a study of their nature and significance in our modern society. Included will be topics relevant to careers, historical background, and current trends. *Grade Only CSU and UC (CAN KINE/PE2)*

PE-66 Concepts of Physical Education and Exercise *(3 units lecture)* An introductory course covering physical fitness exercise programs, health, physical fitness testing, rehabilitation of injuries and body mechanics. The course also covers diet and nutrition related to athletic performance and weight control. *Grade Only CSU and UC*

PE-67 Theory of Football *(1 unit lecture)* This course is for students interested in learning the theory of different offensive and defensive philosophies. Students will study and evaluate these differences through lecture, film, and video tape. *May be repeated to a maximum of two enrollments. CR/NC option CSU and UC*

PE-68 Care and Prevention of Sports Injuries *(2.5 units lecture / lab)* A course in the care and prevention of sports injuries. The course covers: causes of sports injuries, recognition and care of injuries, therapeutic modalities, principles of rehabilitation, and taping techniques. *Grade Only CSU and UC*

PE-71 Officiating Basketball *(1 unit lecture)* This course combines theory and practice in a study of scoring methods, timing procedures, statistical analysis, rules, and techniques used in officiating men's and women's high school and college basketball. *Grade Only CSU and UC*

PE-72 Officiating Baseball/Softball *(1 unit lecture)* This course combines theory and practice in a study of the scoring methods and techniques of officiating baseball and softball. *Grade Only CSU and UC*

PE-78 Selected Sports *(0.5 – 1 units lab)* This course is designed for students desiring late entry into a physical education activity course or who have schedule conflicts which do not allow them to complete their fitness program without some adjustment to the regular class schedule. *Prerequisite: Consent of Instructor May be repeated to a maximum of four enrollments. CR/NC only CSU*

PE-80 Athletic Conditioning *(0.5 – 2 units lab)* This course is to provide conditioning for varsity sports through exercises and practice of skills applicable to specific sports and basic skill development pertaining to those activities. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-90 Adaptive Physical Education *(0.5 – 1 unit lab)* A course designed for a student with a disability desiring participation in a comprehensive fitness program. Individual and group instruction will be provided. Areas to be covered include lifetime fitness programs, stretching-range of motion, cardiovascular conditioning, flexibility and general strength training. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-93 Adaptive Aquatic Swimming *(0.5 – 1 unit lab)* A course providing access to warm water for the student with physical disabilities. This activity lab consists of four major components: 1) resistive water exercises; 2) cardiovascular conditioning; 3) swimming instruction; 4) stretching-range of motion. An individual program for each student will be closely monitored by the instructor. *May be repeated to a maximum of four enrollments. CR/NC option CSU*

PE-98 Adaptive Physical Education *(0.5 – 4 units lab)* A course designed to provide late entry for all areas of Adaptive Physical Education programs PE-90 to PE-99. *Note: This is an open entry/open exit class. May be repeated to a maximum of two enrollments. CR/NC only CSU*

PE-300 Aqua Calisthenics *(0.5 - 1 unit lab)* This course is designed for the physically impaired. It uses warm water as a medium for exercise in conjunction with, or as a follow-up to, physical therapy. *May be repeated to a maximum of four enrollments. CR/NC only*

PE-302 Adapted Conditioning *(0.5 - 1 unit lab)* An introduction to conditioning for students with a disability. Emphasis is placed on toning of muscles, ranging of joints, increased flexibility and stress awareness/control. This course is designed primarily for the student with disabilities, but may also be useful to individuals who are non-disabled who lack the strength and endurance to keep up with the rigors of a regular PE class. *May be repeated to a maximum of four enrollments. CR/NC only*

Physical Science (PHYSC)

PHYSC-10 Introduction to Physical Science *(3 units lecture)* A survey for non-science majors covering the basic topics of physics, chemistry, geology and astronomy. Topics include matter and energy, thermodynamics, electricity and magnetism, light, atomic structure, chemical change, organic chemistry, earth structure and composition, plate tectonics, the solar system and the stars. *Recommended preparation: MATH-105 or MATH-106 CR/NC option CSU and UC*

Physics (PHYS)

PHYS-2A General Physics *(4 units lecture / lab)* An introduction to the structure and language of physics through the study of mechanics, thermodynamics, vibrations, and waves. *Prerequisite: MATH-25 Grade Only CSU and UC (CAN PHYS2)*

PHYS-2B General Physics *(4 units lecture / lab)* A continuation of the study of the structure and language of physics. The subject matter includes electricity and magnetism, optics, and the physics of the atom and its nucleus. *Prerequisite: PHYS-2A Grade Only CSU and UC (CAN PHYS4)*

PHYS-4A Engineering Physics *(4 units lecture / lab)* An introductory course in physics for physical science and engineering majors. The subject matter of the course is classical mechanics. *Prerequisite: MATH-50A Grade Only CSU and UC (CAN PHYS8)*

PHYS-4B Engineering Physics *(4 units lecture / lab)* A continuation of the introductory treatment of physics for physical science and engineering majors. The subject matter includes static electricity; magnetic phenomena; direct and alternating current circuits; the laws of Gauss, Ampere, and Faraday; and electro-magnetic waves. *Prerequisite: PHYS-4A Grade Only CSU and UC (CAN PHYS12)*

PHYS-4C Engineering Physics *(4 units lecture / lab)* A continuation of the introductory treatment of physics for physical science and engineering majors. The subject matter includes geometric and physical optics, the mechanics of solids and fluids, wave motion, thermal physics, and an introduction to relativity and quantum physics. *Prerequisite: PHYS-4B Grade Only CSU and UC (CAN PHYS14)*

PHYS-10 Introduction to Physics *(3 units lecture)* This is an introductory course in physics for those students desiring either a general education exposure to the subject or who wish to prepare themselves for either the Physics 2A/B or the Physics 4A/B/C courses. *Recommended preparation: MATH-120 Grade Only CSU and UC*

Political Science (POLSC)

POLSC-1 Contemporary Problems *(3 units lecture)* This course is an analysis of current American political problems with emphasis on constitutional principles and governmental institutions. *CR/NC option CSU and UC*

POLSC-3 Modern World Problems *(3 units lecture)* An introductory analysis of the workings of the international political system with emphasis on the sources and ramifications of contemporary international problems. *CR/NC option CSU and UC*

POLSC-10 American Institutions *(3 units lecture)* This course addresses both philosophic roots and the contemporary operation of American national, state, and local governments. Specific topics include constitutional development, federal-state relations, and the rights and obligations of citizens under both the federal and the California constitutions. *Grade Only CSU and UC (CAN GOVT2)*

POLSC-12 State and Local Politics *(3 units lecture)* An introduction to state and local politics and government with emphasis on California. Specific topics include governors, state legislatures, state courts, local governments, current issues in state and local politics, California political history, and the California Constitution. *Grade Only CSU*

POLSC-20 Comparative Politics/Government *(3 units lecture)* Systematic analysis and evaluation of differing political systems in Europe and Asia, with an emphasis on governmental structures and political functions. *Grade Only CSU and UC*

POLSC-30 The Campaign Trail *(2 units lecture)* A theoretical and practical examination of national, state, and local campaign tactics. Students are expected to participate in campaigns. *CR/NC option CSU*

Psychology (PSYCH)

PSYCH-1 General Psychology *(3 units lecture)* An introduction to those factors that influence human behavior, child development, learning, cognitive processes, motivation and emotion, personality, social processes, and pathology. *Grade Only CSU and UC (CAN PSY2)*

PSYCH-2 Research Methods in Psychology *(3 units lecture)* An introduction to the basic theory and methods of psychological research. Topics include ethics, measurement, research design, and interpretation of results. *Recommended preparation: MATH-105/106 Grade Only CSU and UC*

PSYCH-10 Psychology of Gender *(3 units lecture)* A study utilizing readings, lectures, and discussions to explore biopsychosocial bases of gender and its implications. Topics include gender development, gender roles, communication, relationships, and social functions. *Recommended Preparation: ENGL-150 CR/NC option CSU*

PSYCH-11 Life Span Development *(3 units lecture)* This course surveys human development from conception through adulthood. It examines the psychological, social, and physiological changes associated with human growth and development. *Grade Only CSU and UC*

PSYCH-20 Biological Basis of Behavior *(3 units lecture)* Covers the relation of nervous, muscular, and glandular functions and structures to adjustment of the human organism. Study is made of the sense organs, perception, physiological basis of emotion, clinical symptoms of abnormal behavior, psychosomatic disorders, sleep, learning, and drug effects. *Prerequisite: PSYCH-1 Grade Only CSU and UC*

PSYCH-29 Altered States of Consciousness *(3 units lecture)* An analysis of the causes and effects of various states of consciousness, including sleep, hypnosis, biofeedback, meditation, bihemispheric thinking, drug states, and others. *Grade Only CSU*

PSYCH-30 Social Basis of Behavior *(3 units lecture)* A study of the influences that people have upon the belief or behavior of others. These influences include interpersonal relationships, group dynamics and attitude formation and change. The course focuses on psychological approaches to contemporary social phenomena such as mass communication, violence and prejudice. *Grade Only CSU and UC*

PSYCH-33 Personal Growth and Adjustment *(3 units lecture)* Introductory survey of the principles of personality development, personal growth, and personal and social adjustment. A few of the topics covered include: understanding and controlling emotions; interpersonal relationships; the psychology of love, sex, and sex roles; work; creativity. In this course students learn to apply psychological theories and principles to their own lives and to overcome barriers to personal effectiveness in learning, work, and interpersonal relationships. *CR/NC option CSU*

PSYCH-38 Abnormal Psychology *(3 units lecture)* An introduction to the study of psychological disorders and mental retardation including types, causes, and treatment. *Grade Only CSU and UC*

PSYCH-100 Essentials of Psychology *(3 units lecture)* An introduction to the basic concepts and terminology of psychology. The course focuses on the biological, cognitive, and socio-cultural perspectives in psychology. *Grade Only*

Radio and Television Production (RT)

RT-1 Introduction to Television Production *(4 units lecture / lab)* A "hands on" introduction exploring all aspects of writing, producing, and directing programs for television. Students will produce live and video taped programs designed for use by the college for instructional purposes. In addition, they will cover live sports events for live sports events for broadcast over cable television. *Recommended preparation: ENGL-150 Note: Students should be familiar with computers and/or be able to demonstrate computer competence and the ability to surf the web. Grade Only CSU*

RT-2 Television Production *(3 units lecture / lab)* Continuing study for the student interested in pursuing a career in commercial or non-commercial television. Students will produce and direct various individual projects along with programs designed for inclusion on local cable TV channels, gain experience in directing programs for C/R Distance Learning programs, and produce and direct television features about various community events. *Prerequisite: RT-1 Grade Only CSU*

RT-3 Film Style Field Television Production *(4 units lecture / lab)* A study of the aesthetic considera-tions and technical practices of field production. Students will learn basic single camera film style production techniques including storyboarding, shot chart development, field lighting, sound capture, post-editing considerations, problem solving and associated terminologies. *CR/NC option CSU*

RT-4 Advanced Film Style Field Television Production *(3 units lab)* An advanced practice of the technical and aesthetic aspects of field production. Students will learn basic, single-camera film-style production techniques including storyboarding, shot chart development, field lighting, sound capture, post-editing considerations, problem- solving, and associated terminologies. *Prerequisite: RT-3 May be repeated to a maximum of two enrollments. CR/NC option CSU*

RT-5 Introduction to Narrative and Broadcast Screenwriting *(3 units lecture / lab)* An introduction to the concepts and structure of screenwriting and broadcast news presentations. Emphasis is placed on the development of the initial story idea into a viable, professional shooting script for television or film. Additionally, students learn to write, re-write and edit stories using computers, incorporate sound tracks and visuals into stories. *Grade Only CSU*

RT-6 Introduction to Video Editing *(3 units lecture / lab)* Introduction to the concepts of digital video. In this hands-on course students work in a multimedia computer lab to capture, create, and edit video files to be used in film and video productions. Students will use VHS and Hi8 hardware and an encoding capture card to translate video from analog to digital formats and then use non-linear editing software to manipulate and enhance digital video clips. *Grade Only CSU*

RT-7 Television Directing *(3 units lecture / lab)* Techniques and theories of television production and direction for both film style and multi-camera usage. Preproduction considerations of story-boarding, shot selection, scheduling, location scouting, cast and crew assemblage, rehearsals, and blocking will be presented. Mis-en-seine vs. montage directing techniques and post-editing concerns will be addressed for both in-studio and field productions. *Grade Only CSU*

RT-8L Advanced Television and Production Lab *(2 units lab)* An advanced practice of the aesthetic considerations and technical practices of in-studio and field television/video production. Students will engage in fine tuning production techniques including visualization, storyboarding, elements of continuity style, composing shots and spatial connections, shot chart development, field lighting, sound capture, post-editing considerations, problem solving and the collaborative process. *Prerequisite: RT-2 or RT-4 May be repeated to a maximum of two enrollments. Grade Only CSU*

Real Estate (RE)

RE-10 Real Estate Principles *(3 units lecture)* A general survey of real estate concepts including land description, estates in land and methods of acquiring title, conveyancing and recording laws, encumbrances and liens, laws governing brokers and salespersons, contracts, finance, appraisal, landlord and tenant, escrows, taxation and government land use controls, and basic real estate mathematics. *Grade Only CSU*

RE-11 Real Estate Practices *(3 units lecture)* A survey of the various aspects of a real estate practice emphasizing the role, rights, responsibilities and duties of the broker, salesmanship, and the attributes necessary for success in real estate. Also discussed are other aspects of real estate pertinent for a successful practice including financing, the appraisal process, tax considerations, escrow and title aspects, and the impact of government controls. *Recommended preparation: RE-10 Grade Only CSU*

RE-12 Real Estate Legal Aspects *(3 units lecture)* An examination of the basic principles of California real property law. Topics include: conveyances, contracts of sale, ownership, wills and succession, agency and real estate brokerage, zoning, the landlord/tenant relationship, eminent domain, adverse possession, deeds of trust, mortgages and installment contracts, restrictive covenants and conditions, environmental law and taxation. *Recommended preparation: RE-10 Grade Only CSU*

RE-13 Real Estate Finance *(3 units lecture)* Practical study and analysis of money markets, interest rates, and real estate financing with actual case illustrations demonstrating lending policies. *Recommended preparation: RE-10 Grade Only CSU*

RE-14 Real Estate Appraisal *(3 units lecture)* A general discussion of the factors influencing real estate value and an in-depth analysis of the three principal approaches to real estate appraisal: the market approach, cost approach, and income approach. *Recommended preparation: RE-10 Grade Only CSU*

RE-15 Real Estate Economics *(3 units lecture)* A study of the basic principles of economics specifically applied to national, regional, and local real estate markets. Special emphasis is placed on the impact of taxation, land use controls, and environmental controls upon the value and investment return potential of individual parcels. *Recommended preparation: RE-10 Grade Only CSU*

RE-17 Real Estate Property Management *(3 units lecture)* A course in managing residential and commercial properties which includes attracting and maintaining tenants, proper record keeping for investment and tax purposes, landlord/tenant relations, property maintenance, and upkeep. *Recommended preparation: RE-10 Grade Only CSU*

RE-18 Real Estate Investment Analysis *(3 units lecture)* An advanced course on the investment aspects of real estate; computing of real property income flows; itemizing and accounting for operating expenses and computing income tax aspects of real estate investment analysis. An emphasis will be placed on apartment and small commercial real estate investment. *Recommended preparation: RE-10 Grade Only CSU*

Sign Language (SNLAN)

SNLAN-1 Introduction to Sign Language *(3 units lecture)* This course studies the various sign systems used in communication with hearing impaired persons in the United States. It also introduces elementary signs, finger spelling, and information about the deaf culture and its history. *CR/NC option CSU*

SNLAN-4A American Sign Language *(4 units lecture)* A study in the fundamentals of American Sign Language—its grammar, syntax, vocabulary— and introduction to basic information about the hearing impaired, the Deaf culture, and the deaf community. *Note: Field trips will be taken to Deaf Cultural events. The College does not provide transportation. CR/NC option CSU and UC*

SNLAN-4B American Sign Language *(4 units lecture)* A continuation of American Sign Language, Deaf culture, and the deaf community. The theory of American Sign Language grammar is stressed along with vocabulary building. *Prerequisite: SNLAN-4A Note: Field trips will be taken to Deaf Cultural events. The College does not provide transport-ation. Grade Only CSU and UC*

SNLAN-6 Conversational Sign Language *(1.5 units lecture / lab)* A course designed to provide conversational skills in sign language and signed systems. Both sign language and finger spelling are studied and practiced. *May be repeated to a maximum of two enrollments. CR/NC only CSU*

Sociology (SOC)

SOC-1 Introduction to Sociology *(3 units lecture)* An introduction to the discipline of sociology including the basic concepts, principles, and research techniques of sociology. It emphasizes the study of the structures of patterned social interaction including the analysis and explanation of society, human culture, social groups, social institutions, social structure, social stratification, social deviation, and social change. *Grade Only CSU and UC (CAN SOC2)*

SOC-2 Social Problems *(3 units lecture)* This course includes the identification and analysis of social problems from a sociological perspective and the introduction and application of the sociological concepts to the analysis of social problems. Major sociological theoretical perspectives regarding social problems and differing problem solving approaches will be examined. *Grade Only CSU and UC (CAN SOC4)*

SOC-3 Human Sexuality *(3 units lecture)* This course provides a comprehensive introduction to the biological, psychosocial, behavioral, and cultural aspects of sexuality. The approach is both academic and self-help problem solving. *Grade Only CSU and UC*

SOC-5 Introduction to Race and Ethnic Relations *(3 units lecture)* This course will examine the nature of racial and ethnic relations in American society especially as these relationships interface with the dominant culture. A comparative sociological and historical approach will be used to analyze the experiences of Asians, American Indians, Blacks, and Chicanos from colonial times to the present. *Grade Only CSU and UC*

SOC-6 Women in Contemporary Society *(3 units lecture)* This course is an introduction to the study of roles, functions, and consciousness of women in the U.S. and other countries from a sociological perspective. It will concentrate on analyzing the relationships of women to fundamental economic and social institutions, gender-related problems such as basic interactions between males and females with regard to the above subject, and the effect of mass media on women of different classes, ages, and ethnic groups. *CR/NC option CSU and UC*

SOC-10 Marriage and the Family *(3 units lecture)* This course is an examination of marriage and family with an emphasis on current changes in sex roles, values, and expectations of marriage in contemporary America. The course will include an examination of mate selection, sexual expression, parenting, conflict resolution, divorce, remarriage, and different family forms. *Grade Only CSU*

SOC-33 Death: The Inevitable Crisis *(3 units lecture)* This course provides for a discussion of the cultural, social, and emotional values and behaviors surrounding death. The primary areas that will be explored include the definition of death, euthanasia, suicide, the process of dying, children and death, bereavement, and the funeral industry. *CR/NC option CSU*

SOC-34 Introduction to Social Work *(3 units lecture)* An introduction to the central ideas, values and methods of social work studied from the perspective of historical background and contemporary fields of service. The general method of social work will be introduced. Human diversity is emphasized. *Recommended preparation: POLSC-10 Grade Only CSU*

SOC-38 Field Experience *(3 units lecture / lab)* An integration of social service theory with supervised field work experience emphasizing developing skills, understanding agency organization, and building a knowledge base regarding social needs and problems. The student may volunteer or seek paid employment in a community or campus social service agency. *Note: Field trips are required. The college does not provide transportation. Grade Only CSU*

Spanish (SPAN)

SPAN-1A Elementary Spanish *(4 units lecture)* A beginning course in the Spanish language. Instruction in understanding, speaking, reading, and writing Spanish with an emphasis on speaking and pronunciation. *CR/NC option CSU and UC (CAN SPAN2)*

SPAN-1B Elementary Spanish *(4 units lecture)* A continuation of SPAN-1A with continuing emphasis on speaking and pronunciation. *Prerequisite: SPAN-1A Grade Only CSU and UC (CAN SPAN4)*

SPAN-2A Intermediate Spanish *(4 units lecture)* A study in understanding, speaking, reading, and writing Spanish at the intermediate level with emphasis on spoken Spanish and increasing attention to reading and writing. It includes a grammar review and vocabulary expansion exercises and appreciation of the diverse Hispanic cultures. *Prerequisite: SPAN-1B or equivalent Grade Only CSU and UC (CAN SPAN8)*

SPAN-2B Intermediate Spanish *(4 units lecture)* A continuation of SPAN-2A. It includes understanding, speaking, reading, and writing Spanish at the intermediate level with emphasis on spoken Spanish and increasing attention to reading and writing. It expands appreciation and knowledge of the diverse Hispanic cultures. Course emphasis is on culturally authentic reading and writing, along with continued development of listening/speaking competencies. *Prerequisite: SPAN-2A or equivalent Grade Only CSU and UC (CAN SPAN10)*

SPAN-8A Elementary Conversational Spanish *(3 units lecture)* Designed to develop oral communication skills. Emphasis on increasing vocabulary; improving listening comprehension; mastering pronunciation, accuracy, and grammar control. This course will help students expand their oral proficiency at the elementary level through a variety of personalized situations that progress from easy to more complex open-ended conversations. The course reinforces spontaneity and intuition as a natural response while immersing the students in the Hispanic cultures. *Prerequisite: SPAN-1A or equivalent Recommended preparation: SPAN-1B CR/NC option CSU*

SPAN-11A Beginning Conversational Spanish *(3 units lecture)* A beginning course in conversational Spanish with special emphasis on pronunciation, speaking, and vocabulary building. The concepts and vocabulary presented are designed to be useful to travelers in Spanish-speaking countries and to those who work with Spanish-speaking people. *CR/NC option CSU*

SPAN-11B Beginning Conversational Spanish *(3 units lecture)* A continuation of SPAN-11A with continued emphasis on pronunciation, speaking, and vocabulary building. *Prerequisite: SPAN-11A CR/NC option CSU*

SPAN-12A Intermediate Spanish Conversation *(3 units lecture)* A conversation course for students who are familiar with the basic structures of the Spanish language and with the vocabulary generally studied in elementary courses. Emphasis is on developing conversational ability in Spanish. Includes a grammar review combined with classroom discussions on a variety of topics. *Prerequisite: SPAN-11B CR/NC option CSU*

SPAN-12B Intermediate Spanish Conversation *(3 units lecture)* A continuation of SPAN-12A, with continued emphasis on developing conversational ability and vocabulary. *Prerequisite: SPAN-12A CR/NC option CSU*

Speech (SPCH)

SPCH-1 Public Speaking *(3 units lecture)* An introduction to the process of human communi-cation with emphasis on public speaking. Topic and purpose choices, research and organization of materials, language choices, audience analysis and adaptation, listening principles, values and ethics of persuasion are to be studied as part of the course. *Grade Only CSU and UC (CAN SPCH4)*

SPCH-6 Group Decision Making *(3 units lecture / lab)* This course is a study of small group communication principles and an application of those principles in class. Critical thinking will be emphasized as the development and effective functioning of groups is studied. *Grade Only CSU and UC (CAN SPCH10)*

SPCH-7 Interpersonal Communication *(3 units lecture)* This course is designed to increase interpersonal effectiveness in informal communication settings. Students will read, discuss, and apply concepts and principles dealing with inter-personal communication: the process of sending/receiving messages between two persons or among a small group with some effect and immediate feedback. *Grade Only CSU (CAN SPCH8)*

Tourism and Hospitality (TH)

TH-1 Introduction to the Hospitality Industry *(3 units lecture)* Overview of the structure and components of the hotel, food-service, restaurant, and travel and tourism businesses, including operations, marketing, and sales. The course focuses on orientation to customer service, cultural and economic trends, and career opportunities. *Grade Only CSU*

TH-2 Managing Front Office Operations *(3 units lecture)* Principles of organization, management, and decision making applied to tasks and challenges of hospitality Front Office Management. Examines a systematic approach to front office procedures by detailing the flow of business through a lodging operation, beginning with the reservation and ending with check out. *Grade Only CSU*

TH-3 Presenting Service *(0.5 unit lecture)* Basic and advanced topics to provide successful table and customer service for hospitality customers. The meaning of service, the tradition of hospitality, and meeting and exceeding guest expectations are covered in this course. Classic service styles, table etiquette, and bar and beverage service elements are included. *Grade Only CSU*

TH-4 Food Safety and Sanitation *(0.5 unit lecture)* Comprehensive food safety and handling knowledge to prepare students for the ServSafe Food Protection Manager Certification Exam. This course provides the latest information in the science of food safety and presents best practices for the restaurant and food-service industry. It conveys the principles necessary to maintain food safety in an operation and explains how to protect against food-borne illness outbreaks. *Grade Only CSU*

TH-5 Legal Aspects of Hospitality Management *(3 units lecture)* Overview of the legal aspects of hospitality operations management. This course covers the basic components of hospitality law, regulations, and civil rights that affect daily operations in hospitality, including liability for the sale of food and beverages; the safety and security of patrons, guests, and property; contracts; property rights; and franchising. *Grade Only CSU*

TH-6 Hospitality Marketing Management *(3 units lecture)* Marketing components and techniques essential to generating satisfactory income levels in hospitality operations. The functions of marketing including behavior patterns of the hospitality market, a tailored product-service mix, and appropriate sales techniques are among the topics covered in this course. Step-by-step models and processes for developing marketing plans, evaluating marketing research, developing sales forecasts, and planning sales presentations are also covered. *Grade Only CSU*

Welding Technology (WT)

WT-53 Welding Procedures *(2 units lecture / lab)* This course is an introduction to oxyacetylene and electric arc welding theory, equipment and processes with coordinated lab experience. *CR/NC option CSU*

WT-54 Welding Procedures *(2 units lecture / lab)* This course covers oxyacetylene and electric arc welding, brazing processes and equipment, and weld testing and design. Also covered will be welding repair, applications and procedures and coordinated laboratory experience. *Grade Only CSU*

WT-56 Welding Procedures Lab *(1 unit lab)* This course covers intermediate to advanced oxyacetylene welding and cutting and/or shielded metal arc welding practice. *Prerequisite: WT-54 May be repeated to a maximum of two enrollments. Grade Only CSU*

WT-60 Welding Technology *(4 units lecture / lab)* An introduction to oxyacetylene welding theory and equipment, oxyacetylene cutting theory and equipment, direct current arc welding, and A.C. Arc welding theory and equipment. Instruction in all phases of arc and oxyacetylene welding and types of equipment are given. *Grade Only CSU*

WT-61 Welding Technology *(4 units lecture / lab)* This course covers the theory of oxyacetylene and arc welding equipment and supplies, theory of arc and oxygen arc cutting, soldering, and manipulative skill in these areas. Also covered are the theory of brazing and braze welding, theory of electric arc welding, and manipulative skill in these areas. *Grade Only CSU*

WT-63 Welding Technology *(4 units lecture / lab)* A course in welding procedures, theory of layout, cutting patterns, resistance welding, and welding in all positions with an emphasis on welding repair work. The theory of procedures and welding qualifications and of inspecting and testing welds will be included. *Grade Only CSU*

WT-64 Welding Technology *(4 units lecture / lab)* A course which will study the theory of metal surfacing and its application in welding repair. Also covered will be special welding processes such as tool and die steel welding, stainless steel welding, special welding theory applications; the theory of special cutting processes such as oxygen lance cutting and automatic welding and cutting. *Grade Only CSU*

WT-67 Special Welding Laboratory *(2 units lab)* An advanced lab class for students who have completed the welding tech program. *Prerequisite: WT-54 and 90 May be repeated to a maximum of four enrollments. Grade Only CSU*

WT-90 MIG/TIG Welding *(2 units lecture / lab)* This course teaches the principles of gas shielded welding such as tungsten gas arc welding or metallic gas arc welding. Also covered are power sources, torches, wire feeding, devices, shielding gases, gas control equipment, and tungsten electrodes. Laboratory practice is in typical welding problems using both tungsten gas arc welding and metallic gas arc welding methods. *Note: Prior oxyacetylene welding experience required. Grade Only CSU*

WT-91 MIG/TIG Lab *(1 unit lab)* This course provides the advanced MIG and TIG welding student with the opportunity for further skill development. *Prerequisite: WT-90 May be repeated to a maximum of two enrollments. Grade Only CSU*

WT-180 Welding Fabrication *(2 units lecture / lab)* This course covers welding fabrication which will include: safety, welding techniques, design, and construction of welded structures. Also covered will be the principles of steel fabrication and the manufacture of modern welded structures, with an emphasis on industrial applications. *Prerequisite: One semester of Welding Note: This course will be valuable for vocational/technical majors and anyone interested in industrial procedures. May be repeated to a maximum of four enrollments. Grade Only*

Photo: Bosha Struve

College of the Redwoods Lakeview Room, Dining Hall and adjacent gazebo viewed from the upper lake.

Selected Topics and Independent Study Courses

Each academic department within College of the Redwoods has the option to offer these types of courses.

Selected Topics are intended to meet the needs of disciplines for flexibility within the curriculum.

XXXXX 99 Selected Topics in XXXXXX *(0.5 - 3 units lecture/lab)* An exploration of a specific topic of contemporary interest in the field of XXXXX. Students should consult the Schedule of Classes for topics offered in the current semester. Variable 0.5 – 3.0 units with a varying mix of lecture and/or lab hours.
Prerequisite: at discretion of department Corequisite: at discretion of department Recommended preparation: at discretion of department Note: Repeatable to a maximum of 4 enrollments, however, students may not repeat an individual topic. Grade-CR/NC option CSU and UC

XXXXX 199 Selected Topics in XXXXXX *(0.5 - 3 units lecture/lab)* An exploration, at a nontransferable level, of a specific topic of contemporary interest in the field of XXXXX. Students should consult the Schedule of Classes for topics offered in the current semester. Variable 0.5 – 3.0 units with a varying mix of lecture and/or lab hours.
Prerequisite: at discretion of department Corequisite: at discretion of department Recommended preparation: at discretion of department Note: Repeatable to a maximum of 4 enrollments, however, students may not repeat an individual topic. Grade-CR/NC option

Independent Study projects are individual arrangements between instructor and student.

XXXXX 40 Independent Study *(0.5 - 2 units lecture/lab)* A course involving the individual student in research or activity in the field of XXXXXX. Specific projects will be determined upon consultation with the instructor. Laboratory hours will be arranged. A written report or evaluation of the work completed will be required by the end of the semester. Variable 0.5 – 2.0 units, 1.5 – 6.0 lab hours per week.
Prerequisite: none Corequisite: none Recommended preparation: none Note: Repeatable to a maximum of 4 enrollments. Students taking independent study courses must have a contract on file. Grade-CR/NC option CSU and UC

Photo & Interview by Jack Hackmann

CR: CHANGING STUDENTS' LIVES

For CR student and Student Body Vice President Yusef Swafford it's been more than a just a change in geography and an elapse of time since he was hunting in the hills of Tennessee with his father. "It's a process of growing up and deciding what you want with your life," he said.

After enrolling in Middle Tennessee State University with a goal of majoring in Environmental Science and Industrial Technology, Swafford wasn't quite certain if this area of study was what he wanted. "I took the Navy aptitude test and they offered me a choice of programs in either the electronics or nuclear field. I went with electronics"

Boot camp at the Great Lakes Naval Training Center on the shores of Lake Michigan wasn't the greatest way to celebrate Christmas that year. "Several of my fellow recruits incurred foot and leg injuries from marching in the snow," he recalled. Eventually, after two years at various military training schools, he experienced a warmer climate when he was stationed on the *USS Boxer* based in San Diego. His tours of duty took him to southern Asia and the Red Sea and involved work with electronic communications. "The military emphasized the 'Mission Critical' approach to a workplace challenge. They were very goal oriented." he noted.

Swafford settled in San Diego after his six-year enlistment was over and began work in the electronics field. But it was a trip to the Eureka area that changed his life and probably saved it. He was visiting a former shipmate who had attended CR and was enrolled at HSU when he was informed that a car had crashed into his home in San Diego, gone through his bedroom, and rolled over in his living room.

"I was considering going back to school anyhow and I really liked the Humboldt County area. The pace of life is very relaxed. The incident with the car crash just made it easier to make a change in my life. The Navy had given me a 'hands-on' experience in the electronic field. The academic side, however, emphasizes math as a means of problem-solving. I knew that if I wanted to advance, I would need to finish my education."

"It's a process of growing up and deciding what you want with your life… The Navy had given me a 'hands-on' experience in the electronic field. The academic side, however, emphasizes math as a means of problem-solving. I knew that if I wanted to advance, I would need to finish my education."

Yusef Swafford

It was while working with CR counselor Jim Estes that Swafford became aware of the student government. Estes is the CR administration's representative to the ASCR (Associated Students of College of the Redwoods). Swafford enrolled at CR in fall of 2003 and successfully ran for Student Body Vice President.

After brushing up on his math skills and taking some general education courses, Swafford hopes to transfer to UC Davis, UC San Diego, or the Oregon Institute of Technology and major in electronics or photonics.

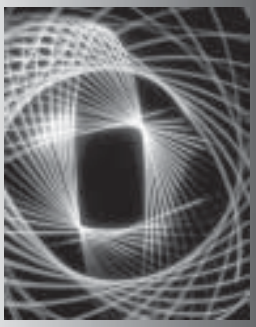

Photo: Paul DeMark

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College of the Redwoods makes a committment to help each student admitted to the college to be successful. Faculty and staff at College of the Redwoods are extremely proud of what the community college stands for. We are confident that we can make a significant contribution to your college career. Get to know us. We think students are the most important people on campus.

Photo's: Paul DeMark & CR Staff

CR ... your community college ... changing lives for 40 years!

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Physical Education
ATC, (Certified Athletic Trainer)
B.A., San Diego State University
M.A., Humboldt State University

YOKOYAMA, Kevin I.
Mathematics
B.A., Humboldt State University
M.S., Utah State University

PRESIDENT'S AWARDS

Photo: Paul DeMark

Each year the Academic Senate of College of the Redwoods honors one full-time faculty member and one part-time faculty member for their outstanding performance, achievements, and service to the college. These outstanding members of the faculty are designated by the Senate as "Faculty of the Year." Members of the faculty who have been awarded this distinguished title are listed below.

OUTSTANDING ASSOCIATE FACULTY MEMBER

1989-90	Richard Kandus
1990-91	Hal Genger
1991-92	Maralyn Renner
1992-93	Bill Harger
1993-94	Judith Hinman
1994-95	Chris Christensen
1995-96	Darrel Durst
1996-97	Susan Brant
1997-98	Bill Crowe
1998-99	All Associate Faculty
1999-2000	Gay Scott (EKA) Carolyn Steinbuck (MC)
2000-2001	Mimi La Plant (EKA)
2001-2002	Ann Marie Woolley (EKA) Mike Selfridge (DN) Suzanne Byerley (MC)
2002-2003	Jack Stafford (DN) Bill Hiney (EKA)
2003-2004	Nancy Schafer (EKA) Wayne Bricco (DN) Steve Jordan (MC)

OUTSTANDING FACULTY MEMBER

1970-71	Van Tanner
1971-72	Florence Brown
1972-73	James McAuley
1973-74	Robert Thomas
1974-75	Rae Graham
1975-76	Jack Storm
1976-77	Dennis McKenzie
1977-78	John Cooper
1978-79	Wilson Kale
1979-80	David Mills
1980-81	Mary Zinselmeir
1981-82	Wallace Pedrotti
1982-83	Norman Ladd
1983-84	Floyd Bettiga
1984-85	David Harris
1985-86	Harold Snelgrove
1986-87	John Regli
1987-88	Ben Hawkins
1988-89	Marian Perry
1989-90	Carole Bright
1990-91	Bill Henry
1991-92	Barbara Morrison
1992-93	Glenn Stockwell
1993-94	Jerrold Moore
1994-95	Steve Durham
1995-96	Bill Treglown
1996-97	Sandra Vrem
1997-98	Patricia McCutcheon
1998-99	David Banducci
1999-2000	Bert Walker (EKA) Carol Mathews (DN) Teresa Sholars (Mendo)
2000-2001	Bob O'Connell (EKA) Ken Letko (DN) Bob Winn (Mendo)
2001-2002	Dave Arnold (EKA) Sharon Mellett (DN)
2002-2003	Steve Brown (EKA) Darlene McClure (DN) James Ritter (MC)
2003-2004	Karen Sperry (EKA) Tom Owen (DN) Greg Grantham (MC)

EMERITUS

ADAMS, Richard A.
Business

ANDERSON, Bryant (Brooks)
Counselor

ATWELL, Gerald (Dick)
Applied Technology

BALLANTYNE, Orrel
Biology

BARTLEY, Jerrie
Early Childhood Education

BENNETT, Richard
Dean CRDN

BETTIGA, Floyd
Art

BOYD, Dean
Music/Speech

BREWER, Samuel A.
Spanish and French

BRIGGS, Catherine C.
Licensed Vocational Nursing

BRIGGS, Ellsworth R.
V. P. Instruction

BRIGHT, Carole
Sociology/Counselor

BROWN, Florence
Reading Laboratory

BUGBEE, Marie A.
School Nurse

BUMPUS, Ralph E.
Auto Mechanics

BUTZ, Alfred,
Science/Math/ Engineering/ Geology/Geography

CABLES, Merle L.
Economics

CARRANCO, Lynwood
English

CINNAMOND, Roger H.
Art

CIVILETTI, Margaret
Information Science

COLLINS, Dale
Assist. to Exec. Vice President

COOLEY, Donald A.
Aeronautics/Applied Tech

EMERITUS

COOPER, John
Psychology

COYLE, Bill J.
Computer & Electronic Tech

CROSSAN, Thomas (Tom)
Applied Technology

DART, Richard E.
Truck Driving

DAWSON, Lawrence (Larry)
Psychology

DRESSER, Judy
Business

EMMONS, Jerry
Speech

ENDERT, Fred
English

ERICKSON, Erick A.
Electronics

FORTHUN, Philip L.
Journalism

FREITAS, Milton (Milt)
Applied Technology

FURBER, Robert (Bob)
Information Science

GIACOMINI, Thomas
Physical Education

GINSBURG, Arlin
History

GRAHAM, Rae J.
Court Reporting

GREENE, Richard (Pat)
Science

HANCHETT, Warren C.
Forestry

HANNAH, Thomas S.
Dean, Administrative Services

HARTNACK, Wilhelmine (Willie)
French/German

HAWKINS, Bernard (Ben)
Biology

HAZEN, Jean P.
Nursing

HENRY, William D. Jr.
Construction Tech

HOOPES, Chad
History

JENKINS, Diane
Business

JOHNSON, Allen
Applied Technology

JOHNSON, Bert B.
English

JOHNSON, Milo
Chemistry

KALE, Wilson (Will)
Forestry

KAVANAUGH, Joan
Health Occupations

KILPATRICK, Ron
Adminisration of Justice

KORN, Gary
Librarian

KRENOV, James
Fine Woodworking

LADD, Norman E.
Mathematics

LEACH, Albert C.
Music

LEMLEY, William D.,
English

LEWIS, Nadine
Nursing

LUCCHESI, Charles,
Physical Education, V.P. Student Personnel

LUDE, Carl J.
Counselor

MCAULEY, James (Jim)
Physical Education

MCCORKENDALE, Thomas (Tom)
Applied Technology

MCKNIGHT, Gregory
Cooperative Education Program

MACKEY, Miles
Chemistry

MECHAM, Flora
Reading

MILLER, Robert (Bob)
Legal Assistancy
Court Reporting

MILLS, David
Physics

MOORE, Jerrold (Jerry)
Music

MORRIS, Charles S.
Dean, Community Services

MORRIS, William
English

NASH, Lewis H.
Philosophy

O'CONNELL, Robert (Bob)
Astromony

PATTERSON, Ben
Applied Tech

PEDROTTI, Wallace
Physics/Mathematics

PERRY, Marian
Health/Physical Education

PORTUGAL, Eugene J.
District Superintendent and President

REED, Malcolm
Business

REGLI, John T.
Agriculture/ Economics

REID, Ellen
Business

RICHTER, L. E.
Director, Occupational Education

RITTER, James (Jim)
Counselor

ROSETH, Sonja (Velasco)
Special Ed/ DSP&S

SARBOE, Philip J.
Athletic Director and Chairperson, Health, Physical Education and Recreation

SARLEY, Virginia
English

SAVAGE, Barry
Research Development

SHAPEERO, Bill
Biology

SIX, Gerald P.
Dean, Student Services

SLOAN, Garland V.
Construction Technology

SMITH, Vernon A.
History/Political Science

SNELGROVE, Harold (Hal)
English

SOPER, Ernest W.
Metals Technology

SPENCER, Walter A.
Mathematics

SPRANKLE, Maureen
Information Science

STEWART, Margaret
Nursing

STOCKWELL, Glenn
Political Science

STORM, Richard J. (Jack)
Anthropology/ History

SYLVIA, Jim
Physical Education

TANNER, Van H.
Police Science, Director, Public Safety

THOMAS, Robert
Biology

TREGLOWN, William (Bill)
Health/Physical Eduation
Basketball Coach

VALDI, Gary
Counselor

VELLIS, Lewis J.
Construction Technology; Dean, Counseling; Counselor

WARES, Dorothy
Nursing

WEICHERT, Donald D.
President/ Superintendent

WILKINS, Robert E.
Business

WINN, Robert
English/History

WINSLOW, Robert W. (Wally)
Posthumously, Information Science

WOLD, Cristie
Nutrition/Family Life Education

ZINSELMEIR, Mary
Counselor

COLLEGE OF THE REDWOODS
PHONE LIST
(EUREKA CAMPUS)

If you're not sure where to find the information you need about the campus, our application and enrollment process, or the many fine programs we offer, please call the STUDENT ASSISTANCE CENTER at 476-4200. The staff of the Center are well informed about all aspects of the College and will be able to refer your call to the right place the first time, with a minimum of hassle. For those of you who know what you need, we are happy to provide the following list of campus telephone numbers for your reference.

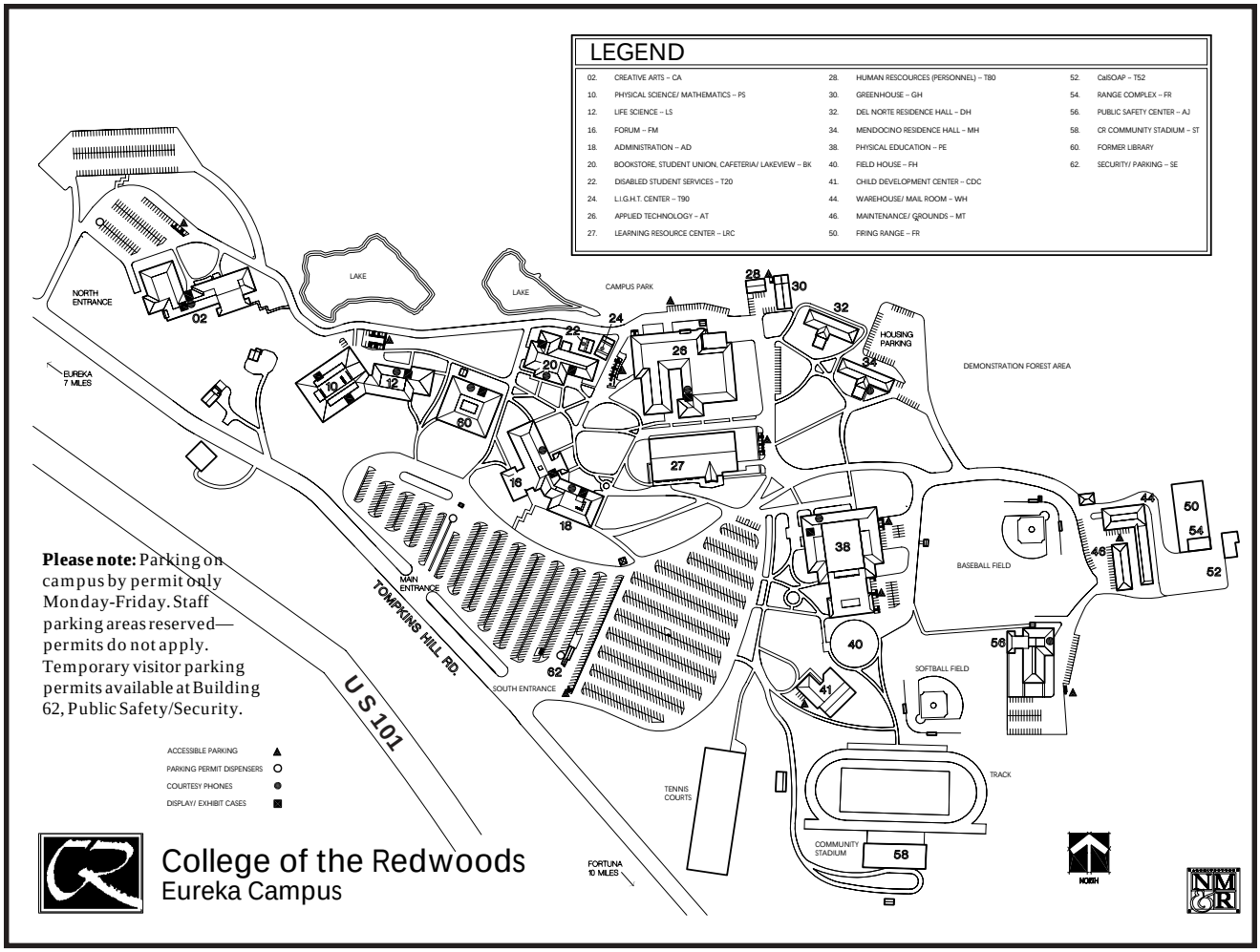
IF YOU WANT	BLDG.#	PHONE #
Academic Affairs	18(UF)	476-4174
Arts, Languages & Social Sciences		476-4559
Business & Technology		476-4558
Health Occupations		476-4214
Humanities & Communication		476-4559
Math, Science, & Engineering		476-4558
Public Safety Center (AJ)		476-4304
Academic Support Center	27	476-4106
Access Careers in Teaching	14	476-4538
Adaptive P.E./Weight Room	38	X4655
AmeriCorps	14	476-4538
Art Gallery	2	476-4303
ASCR/Student Government	18(LF)	476-4180
Auto Shop	26	X4618
Bookstore	20	476-4130
Business Office	18(UF)	476-4120
Cafeteria	20	476-4237
CalSOAP Office	52	476-4275
CalWORKs Office	18(UF)	476-4150
Campus Security	62	476-4112
CARE/EOPS	18(UF)	476-4150
Career Development and Student Employment Center	18(LF)	476-4159
Cashier	18(UF)	476-4121
Child Development Center	41	476-4337
Communications & Marketing	24	476-4358
Community & Economic Development	26	476-4135
Counseling & Advising Center	18(UF)	476-4150
TTY Line		476-4441
Dental Health Center	26	476-4250
Diesel Shop	26	476-4346
Dining	20	476-4237
Disabled Student Programs and Services	22	476-4280
TTY Line		476-4284
EMERGENCY (Campus)	**62**	**476-4111**
Enrollment Services	18(UF)	476-4200
TTY Line		476-4440
EOPS/CARE	18(UF)	476-4150
Financial Aid	18(LF)	476-4182
TTY Line		476-4442

IF YOU WANT	BLDG.#	PHONE #
Firing Range (Pistol Range)	50	476-4608
Foster Parent Education	56	476-4339
Greenhouse	30	476-4361
Honors Program		476-4327
Housing/Residential Life	32 & 34	476-4294
Human Resources (Personnel)	28	476-4140
TTY Line		476-4443
Information Technology Services	18 (LF)	476-4160
Library	27	476-4260
LIGHT Center	24	476-4290
Maintenance Office	46	476-4380
Nurse	38	476-4149
Physical Education	38	476-4212
Pool	38	476-4255
President/Superintendent	18(UF)	476-4170
Printing Services	26	476-4114
Residence Halls	32 & 34	476-4294
Scholarship Office	18(LF)	476-4188
Student Activities	18(LF)	476-4180
Student Health Center	38	476-4149
Student Learning Support Services	18(UF)	476-4177
Testing and Assessment	27	476-4106
Transfer Center	18(UF)	476-4146
Tutorial Services	27	476-4106
Upward Bound	52	476-4277
Veterans' Services Office	18(LF)	476-4110

LF - *Lower Floor*
UF - *Upper Floor*

NOTICE: "X" is an extension only and can be reached on campus by dialing the 4-digit number OR, from off campus, by dialing 476-4100 and then the 4-digit extension

EMERGENCY (Campus) 62 476-4111



Bldg. No.	Building/Name	Room No.	Telephone Extension Dial 476-
02	CA Creative Arts	CA100-202	4302
06	HS House		
08	BN Ag Farm Buildings/Barn		
10	PS Physical Science/Mathematics	PS100-122 (LF)	4210
		PS200-201 (UF)	
12	LS Life Science	LS100-113	4210
16	FM Forum	FM100-112 (LF)	
16	FM Forum Theater	FM103	
16	FM Humanities	FM200-212 (UF)	4300
18	AD Administration	AD (UF)	
18	AD Business Office	AD (UF)	4120
18	AD Student Assistance Ctr	AD (UF)	4200
18	AD Counsel. & Advising Ctr	AD (UF)	4150
18	AD Financial Aid Office	AD (LF)	4182
18	AD Career Devel/Student Emply	AD (LF)	4159
18	AD Information Sciences	AD (LF)	4208
18	AD Cooperative Education	AD (LF)	4134
20	BK Bookstore		4130
20	SU Student Union/Cafeteria		4237
20	LKV Lakeview Room		
22	T20 Disabled Student Programs & Services (DSPS)		4280
24	T90 LIGHT Center		4290
26	AT Applied Technology	AT100C	4340
26	AT Comm & Econ Develop	AT100	4136
26	AT Health Occupations	AT135	4214
27	LRC Academic Support Ctr	L101	4106
27	LRC Library	L100	4260
27	LRC Distance Ed Classroom	L105	4378
27	LRC DSPS High Tech Ctr	L104	4657
27	LRC Writing Center	L102	4686
28	T80 Human Resources (Personnel)		4140
30	GH Greenhouse		4361
32	DH Del Norte Residence Hall		4294
34	MH Mendocino Residence Hall		4294
38	PE Physical Education	PE100-117(LF)	4212
		PE200-201(UF)	
40	FH Field House	FH100-105	
41	CDC Child Development Center		4337
42	GS Grounds Service		4380
44	WH Warehouse/Mail Room		4386
46	MT Maintenance		4380
50	FR Firing Range		
52	T52 CalSOAP		4275
52	T52 Upward Bound		4277
54	FR Range Complex	FR100-101	4608
56	AJ Public Safety Center	AJ100-111(LF)	4304
		AJ200(UF)	
58	ST CR Community Stadium		
60	CO Concession Stand		
62	SE Campus Security		4112

LF - *Lower Floor* ..... UF - *Upper Floor*

COLLEGE OF THE REDWOODS, DEL NORTE CAMPUS MAP

883 W. WASHINGTON BLVD.
CRESCENT CITY, CA 95531
(707) 465-2300

CLASSROOMS USED BY THE COLLEGE

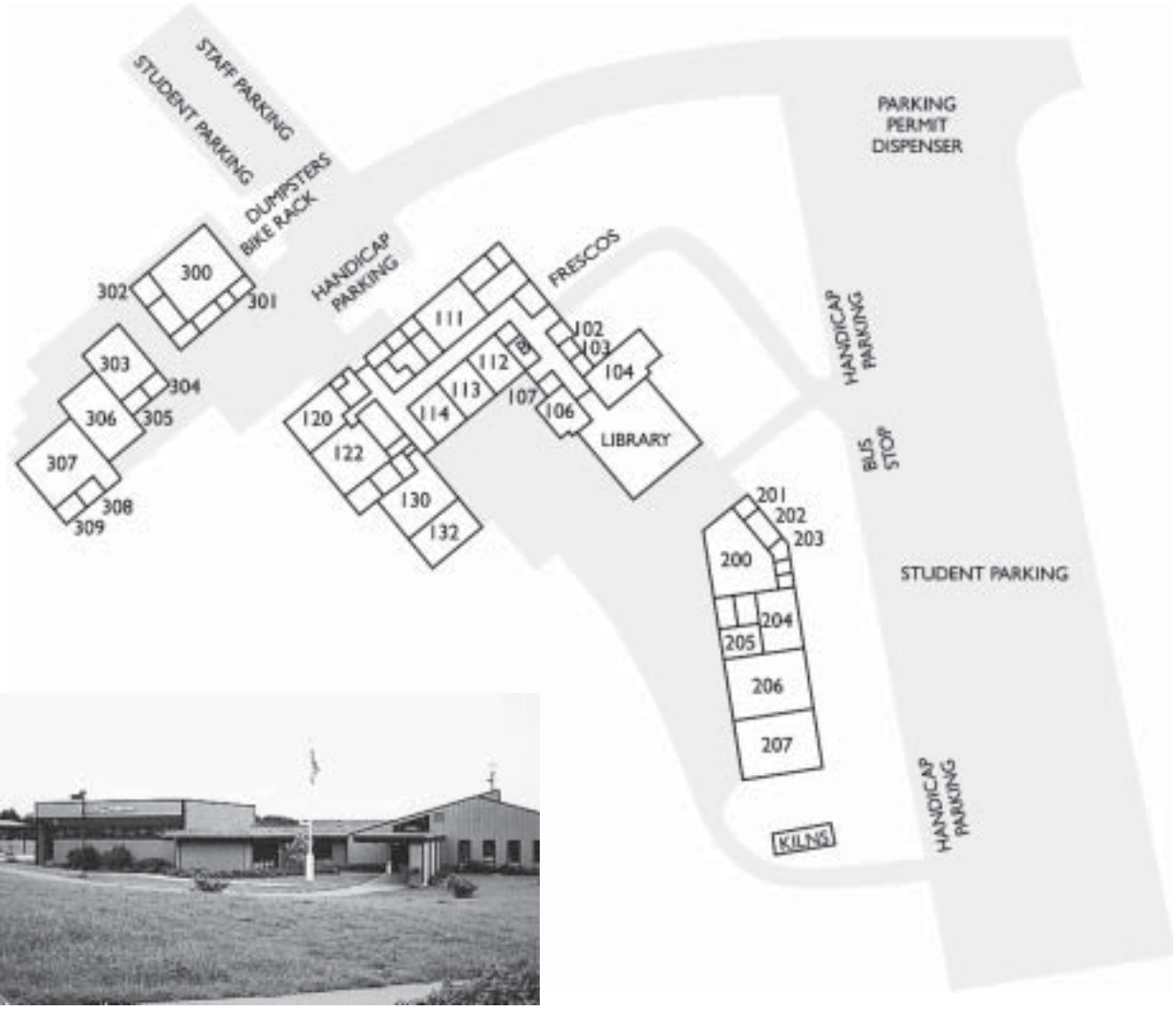
CCC ..... California Conservation Corps, Klamath
CDC ..... Child Development Center
CFP ..... Crescent Fire Protection District Office
DA ..... Art Building
DB ..... Business/Computer Science Building
DM ..... Campus Administration Building
DN ..... Health Sciences Training Center
DNHS ..... Del Norte High School
DOC ..... Del Norte Off Campus
DRC ..... Disability Resource Center
HOS ..... Sutter Coast Hospital

TELEPHONE DIRECTORY

Administration	465-2300
TYY	465-2355
Associate Faculty Office	465-2347
Bookstore	465-2370
Career Center	464-0780
Counseling	465-2303
Disability Resource Center	465-2352
Disabled Student Services	465-2324
TYY	465-2354
Enrollment Services	465-2303
Financial Aid	465-2326
Library	465-2330
Student Support Services	465-2320

College of the Redwoods, Mendocino Coast Campus Map

1211 Del Mar Drive
Fort Bragg, CA 95437
(707) 962-2600



Classrooms Used by the College

FBHS ..... Fort Bragg High School
300 Dana Street, Fort Bragg
FBRC ..... Fort Bragg Recreation Center
213 East Laurel Street, Fort Bragg
FWW ..... Fine Woodworking Building
440 Alger St., Fort Bragg
MAC ..... Mendocino Art Center
45200 Little Lake St., Mendocino
MHS ..... Mendocino High School
10700 Ford Street, Mendocino
M-100 through M-300 .... Main Campus classrooms
SCC ..... Senior Citizen's Center
490 North Harold St., Fort Bragg
SSS ..... Second Story Studios
307 East Redwood Ave., Fort Bragg

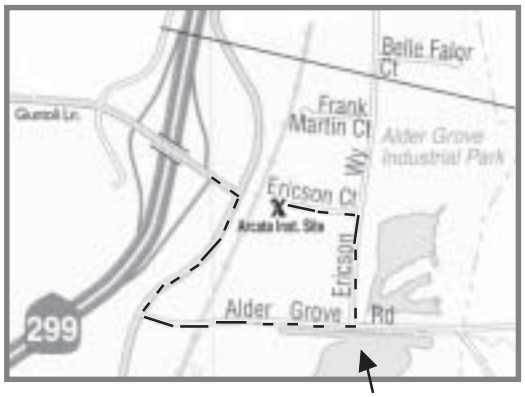
Telephone Directory

Counseling	962-2603
Disabled Student Services	962-2638
Enrollment Services	962-2664
Fax Number	961-0943
Financial Aid	962-2606
Fine Woodworking	964-7056
General Campus Information	962-2600
Learning Assistance Center	962-2639
Learning Skills Lab	962-2637
Library	962-2609
Phi Theta Kappa	962-2600 x2209
Science Department	962-2657
Student Government	962-2600 x2200
T-REG	1-800-700-2126
TTY	962-2637

COLLEGE OF THE REDWOODS, ARCATA INSTRUCTIONAL SITE MAP

LOCATED IN THE FOODWORKS BLDG.
100 ERICSON COURT
ARCATA, CA 955521
(707) 822-8619

Photo's: Jack Hackmann



COLLEGE OF THE REDWOODS

FACTS YOU MIGHT LIKE TO KNOW . . .

Mileage *from* Eureka *to*:	
Alturas	309
Bishop	571
Crescent City	84
Coos Bay	247
Fairfield	286
Gold Beach	152
Grants Pass	172
Los Angeles	659
Medford	188
Oakland	282
Oroville	252
Placerville	341
Portland	466
Redding	150
Reno	377
Sacramento	304
San Diego	776
San Francisco	278
San Jose	325
Santa Cruz	354
Seattle	642
South Lake Tahoe	353
Stockton	332
Susanville	297
Ukiah	162
Vallejo	275
Yosemite	476
Yreka	252
Yuba City	269

For your information . . .

Transportation

Air ..... United Express and Horizon Air serve the Eureka/Arcata Airport (15 miles north of Eureka) with daily flights to San Francisco and other destinations.

Highways ..... U.S. 101 runs north and south. State highways 299 and 36 connect U.S. 101 with Interstate 5 in Redding and Red Bluff.

Bus ..... Greyhound Line (national), Redwood Empire Lines (regional), Humboldt Transit Authority (county) and Arcata and Eureka Transit Systems (city) all service the area.

Monthly Average Rainfall			
January	6.99"	July	.10"
February	5.20"	August	.37"
March	5.05"	September	.90"
April	2.91"	October	2.71"
May	1.60"	November	5.90"
June	.56"	December	6.22"
Annual Average Total	38.51"		

Temperature	*high*	*low*	*average*
January	53.4	4l.3	47.3
February	54.6	42.6	48.7
March	54.0	42.5	48.3
April	54.7	44.0	49.4
May	57.0	47.3	52.2
June	59.1	50.2	54.7
July	60.3	51.9	56.1
August	61.3	52.6	57.0
September	62.2	51.5	56.8
October	60.3	48.3	54.3
November	57.5	45.2	51.4
December	54.5	42.2	48.3
Annual Average	52		

CAMPUS POLICIES AND REGULATIONS

CAMPUS REGULATIONS

- The speed limit on campus is 20 m.p.h.
- Smoking is prohibited in all buildings at College of the Redwoods.
- The College is not prepared to deliver telephone messages except in cases of real emergency.

SMOKING
BOARD OF TRUSTEES POLICY NO. 510/804

Smoking presents a health hazard that can have serious consequences both for the smoker and the nonsmoker. Smoking is a safety hazard both in regard to possible fires in College buildings and as a problem in regard to other maintenance issues. For the purposes of this policy, smoking shall mean all uses of tobacco, including but not limited to cigar smoking, cigarette smoking, pipe smoking, chewing tobacco, and incense.

To protect students and staff who choose not to smoke from an unhealthy environment, the Board prohibits smoking within buildings or facilities owned or leased by the District. We ask that in consideration of others you refrain from smoking within 25 feet of a window, an exit, or an entrance to a building, classroom or office.

Tobacco and related products will not be sold or promoted on any campus of the District.

STUDENT PARKING
(ALSO SEE P. 15, PARKING FEES - EUREKA CAMPUS)

All parking on the College of the Redwoods campuses is at the discretion of the vehicle operator. College of the Redwoods assumes no liability for loss or damage incurred by any vehicle or its contents while on college property. Additionally, all parking on the Eureka campus is by permit only.

Permits are purchased from the Security Office.

Purchase of a parking permit does not guarantee that a parking space will be available in the area desired. A student parking permit authorizes the purchaser to park in any general parking area on campus.

Parking is permitted in special purpose parking as indicated:

Lots/spaces identified with markings of:

RED ..... no parking
BLUE ..... disabled
YELLOW ..... loading zone
GREEN ..... staff parking
WHITE ..... short-term medical disability

Any other areas as indicated.

Special purpose parking permits are available through Security to permit loading and unloading or for commercial service vehicles providing service to computers, copiers, other equipment or construction on campus. Visitors permits are also available at Public Services/Security.

Photo: Bosha Struve

PERMITS - EUREKA CAMPUS
(ALSO SEE PAGE 15, PARKING FEES)

Vehicles without permits will be cited. Permits must be displayed hanging face out from the rearview mirror or placed on the lower driver's side windshield facing out. Students may place as many vehicles as they wish on their parking permit, but a tag displayed in a vehicle which has not been registered with Security may result in a citation. This helps to reduce the likelihood of parking permit theft.

WARNINGS/CITATIONS

The College of the Redwoods Security Department administers a program which permits the writing of warnings rather than citations for first time ***minor*** offenses. Second or major offenses (such as parking in the red and blue zones) will result in receipt of a citation. Citations issued on campus are enforceable by the Fortuna Police Department.

Five or more unpaid citations make a car eligible for towing or immobilization in accordance with California state law. It is a misdemeanor for citations to be voided on campus once issued. Only the Fortuna Police Department may dismiss a citation.

MOTORIST ASSISTANCE PROGRAM

Security vehicles are equipped to assist motorists locked out of their vehicles and vehicles out of gas, in need of jump starts, or with flat tires. Each situation and vehicle differs, and the responding officer may be forced to recommend outside commercial assistance for some vehicles or situations.

SKATEBOARDS/WHEELED TOYS

Board of Trustees Policy No. 805 prohibits use of skateboards and/or other wheeled toys on campus. First time offenders will be warned. Subsequent offenses will be cited and referred to the Associate Vice President, Student Learning Support Services for disciplinary action.

DOMESTIC ANIMALS ON CAMPUS

Domestic animals or livestock (including dogs and cats) are not allowed on campus. Exceptions are animals used in an instruction program of the college or animals certified for service to assist the disabled and under control of the owner. Lost and stray animals and animals left unattended in vehicles will be referred to the appropriate Animal Control agency for removal from the campus grounds.

STUDENT CODE OF CONDUCT STANDARDS

A student at College of the Redwoods may rightfully expect that the total academic community (faculty, students and administration) will maintain an open environment in which there is encouragement and freedom to learn and grow. The students, in turn, are expected to conduct themselves in accordance with standards of the college. When a student is charged with misconduct, the charge shall be processed in accordance with this policy (Board of Trustees Policy No. 505). The Board hereby acknowledges the establishment of Administrative Regulation No. 505.01 for the purposes of defining standards of student conduct.

A. STUDENT CODE OF CONDUCT STANDARDS

All College of the Redwoods students are encouraged to familiarize themselves with, as well as to conform to, college rules and regulations governing personal conduct on all campuses of the district. Violations of such rules and regulations, for which students are subject to disciplinary action, include, but are not limited to, the following:

1. Continued disruptive behavior, continued willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, College personnel.
2. Assault, battery, physical abuse, violence or threat of violence, or behavior that threatens the health or safety of persons or College property.
3. Willful misconduct which results in injury or death to any person on College property or which results in cutting, defacing, or other injury to any real or personal property owned by the District.
4. The use, sale, or possession of any controlled substance, drug paraphernalia, alcoholic beverages, or any poison classified as such by Schedule D in Section 4160 of the Business and Professions Code, except when alcohol, drugs, or narcotics are lawfully prescribed pursuant to medical or dental care or when lawfully permitted for the use of research, instruction, or analysis.
5. Presence on campus under the influence of any controlled substance.
6. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the governing board.
7. Cheating or plagiarism in connection with an academic program at a College.
8. Forgery, alteration, or misuse of college documents, records, or identification, or knowingly furnishing false information to a College.
9. Misrepresentation of oneself or of an organization to be an agent of the College.
10. Obstruction or disruption, of the College's educational process, administrative process, or other College function.
11. Theft of or damage to College property, or property in the possession of, or owned by, a member of the College community.
12. Unauthorized entry into, unauthorized use of, or misuse of College property. This includes unauthorized entry into, alteration of, or unauthorized use of College computers or databases.
13. Knowing possession or use of explosives, dangerous chemicals, or deadly weapons without prior authorization of the college President.
14. Engaging in lewd, indecent, or obscene behavior.
15. Abusive behavior directed toward, or hazing of, a member of the College community.
16. Violation of any order, notice of which has been given prior to such violation, and which order is not inconsistent with any of the other provisions of this regulation.
17. Soliciting or assisting another to do any act which would subject that student to any form of discipline pursuant to this regulation.
18. Failure to comply with directions of College personnel acting in the performance of their duties, or failure to identify oneself for just cause when requested to do so by College personnel acting in the performance of their duties.
19. Attendance at any session of any class by a student or person who is not officially enrolled in that class, except with the prior permission of the instructor of the class.
20. Sexual assault, acquaintance/date rape; sexual activity without mutual and expressed consent.
21. Persistent disruptions including inordinate demands for time and attention in the classroom, administrative office, or at a campus activity.
22. Persistent or repeated violations of residence hall policies, procedures, or regulations.

B. AUTHORITY OF INSTRUCTORS

Pursuant to the authority contained in Education Code Sections 76030-76037, the Board of Trustees permits an instructor to remove a student from his or her class for the day of removal and the next class meeting. Removal shall be immediately reported in writing to the Associate Vice President, Student Learning Support Services. A student may be removed if he or she has interfered with the instruction process.

(Student Code of Conduct continued next page)

C. Applicable Penalties

In all situations, a student shall be informed of the nature of the charges against him or her and shall be given a fair opportunity to refute them. Arbitrary actions shall not be taken by the College, and a decision may be appealed. Disciplinary action that may be taken because of student misconduct includes the following sanctions:

- **Warning**
- **Suspension**
- **Reprimand**
- **Disciplinary probation**
- **Summary suspension**
- **Expulsion**

D. Due Process Procedures

The Associate Vice President, Student Learning Support Services, or designee shall act directly in situations where the student has violated local, state, or federal laws or the College of the Redwoods *Student Code of Conduct Standards.* The Associate Vice President, Student Learning Support Services, or designee shall review each case of misconduct with the involved student and determine appropriate sanctions and/or remedies.

The Associate Vice President, Student Learning Support Services, or designee shall inform the student in writing of the College's actions and appropriate means of appeal. Students may request a hearing to appeal a suspension or expulsion which shall be arranged by the Associate Vice President, Student Learning Support Services.

For further information regarding students' rights and responsibilities, please contact the Office of the Associate Vice President, Student Learning Support Services.

Substance Abuse Policy

The College recognizes that alcohol can pose risks to the health and safety of individuals, communities and society. (California Education Code Section 25608, and Board of Trustees Policy No. 511, state that alcoholic beverages are not allowed on campus or at College- sponsored events.)

On-Campus Activities

Use, distribution or possession of any controlled substance, illegal drug and/or alcohol on the College premises or at College-sponsored activities is subject to disciplinary action.

Student violations will result in appropriate disciplinary action.

Student Right-to-Know Rates

In compliance with the Student-Right-to-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of the Redwoods Community College District and College of the Redwoods to make available its completion and transfer rates to all current and prospective students.

Beginning in Fall 1999, a cohort of all certificate-, degree-, and transfer-seeking first-time, full-time students were tracked over a three year period. Their completion and transfer rates are listed below. These rates do not represent the success rates of the entire student population at College of the Redwoods, nor do they account for student outcomes occurring after this three-year tracking period.

Based upon the cohort defined above, 31.7 percent attained a certificate or degree or became 'transfer prepared' during a three year period, from Fall 1999 to Spring 2002. Students who are 'transfer-prepared' have completed 56 transferable units with a GPA of 2.0 or better.

Based on the cohort defined above, 23.2 percent transferred to another postsecondary institution, (UC, CSU, or another California Community College) prior to attaining a degree, certificate, or becoming 'transfer-prepared' during a five semester period, from Spring 2000 to Spring 2002.

What To Do If You Have A Concern About Academic Programs or College Services

We at College of the Redwoods recognize that there may be times when students have concerns about educational programs and services. To assist students, we have established a process which allows us to resolve issues informally and protect student rights. The information below will help explain the procedures to be followed to resolve concerns.

1. **Academic Concerns**
   These might be issues related to a class or a faculty member. Generally these issues might include disputes about grading or unfair treatment of a student in a class or related activity. If a student has such a concern, she/he should meet with the faculty member first. If the issue cannot be resolved with the faculty member, the student should contact the Department Chair; for additional assistance, contact the Division Chair. If the issue persists without resolution, please contact the Vice President, Academic Affairs.

2. Concerns About Services

If a student is denied services or access to a program, or is treated unfairly, she/he is encouraged to meet with the appropriate program or department manager. If the issue is not resolved, please contact the Associate Vice President, Student Learning Support Services.

For a complete copy of our *Board Policy and Administrative Regulations*, please contact the Office of the Associate Vice President, Student Learning Support Services. A full set of the college's policies and regulations is also posted on the college website: www.redwoods.edu.

Student Records and Privacy Act

Students at College of the Redwoods are guaranteed certain rights regarding school records and information provided to the College by the *Family Educational Rights and Privacy Act* (FERPA) of 1974, as amended (the *Buckley Amendment)*, and Board Policy No. 506, *Student Records*. A copy of this policy can be obtained from the Director of Enrollment Services. Student rights include:

1. The right to inspect and review all official school records;
2. The right to challenge the correctness of these records;
3. The right of controlled access and release of information.

The College must obtain written consent of the student before releasing personally identifiable information from records to other than a specified list of persons and agencies.

The College may release "directory information" about students unless the student has indicated in writing that such information is not to be released without their consent.

"Directory Information" at this College includes:

- student name
- community of residence
- date and place of birth
- major field of study
- participation in officially recognized activities and sports
- weight and height of members of athletic teams,
- dates of attendance,
- degrees and awards received
- the most recent public or private school attended by the student, and
- any other information authorized in writing by the student

Students are asked on the Enrollment Form to authorize the release of Directory Information. If the answer "yes" is marked, then information listed under "Directory Information" may be released. If "no" was marked, the information will not be released. You may change this designation by submitting the request in writing to the Director of Enrollment Services in the Enrollment Services Office.

These rights are designed to protect the privacy of all students. Your official school records are kept in the Enrollment Services Office. For additional information about student rights under the Privacy Act and District Policy, contact the Director of Enrollment Services.

Non-discrimination - Equal Opportunity

College of the Redwoods is committed to equal opportunity in employment, admission to the College, and in the conduct of all of its programs and activities.

CR's policy complies with *California Education Code* and *Title 5 of the California Administrative Code*, and with related federal laws (*Title VI* and *VII* of the *Civil Rights Act of 1964, Title IX* of the *Educational Amendments of 1972*, and *Section 504* of the *Rehabilitation Act of 1973*).

Under these regulations, College of the Redwoods guarantees that no person shall be subjected to discrimination on the basis of ethnic group identification, religion, age, gender, sexual orientation, color, or physical or mental disability under any of its programs or activities.

All classes are open to those who have met the academic prerequisites. The College also affirms its commitment to affirmative action in employment as a part of its Equal Opportunity/Affirmative Action District Plan.

The Director of Human Resources is the college officer responsible for insuring District compliance with these regulations. Inquiries concerning the application of the above federal and state laws may be directed to the Director of Human Resources or to the following:

I. Unlawful discrimination - Equal Opportunity

Title 5 C.A.C., Title IX/Title VI and VII:
Staff Diversity Coordinator (707) 476-4144

II. Section504

Staff Diversity Coordinator (707) 476-4144

Sexual Harassment

Sexual harassment is a form of unlawful discrimination. Sexual harassment includes unwelcome sexual advances, requests for sexual favors, and other verbal, visual, written, or physical conduct of a sexual nature which makes the work or educational environment offensive, hostile, intimidating, or unpleasant or which interferes with work or academic performance.

(continued)

CR endeavors to provide students and employees with an educational work environment free from sexual harassment and other prohibited discrimination. While on the campus, College employees and students are expected to adhere to a standard of conduct that is respectful and courteous to fellow employees, students, and to the public. The District will not tolerate sexual harassment in any employment setting or in any academic program or activity.

If you need to file a sexual harassment complaint, contact the Staff Diversity & Gender Equity Coordinator, 476-4144.

Academic Accommodations

Qualified students with disabilities who may be reasonably accommodated will not be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination under any academic, research, occupational training, housing, health insurance, counseling, financial aid, athletics, recreation, transportation, or other extracurricular or educational program or activity provided by the College Board Policy No. 533.

Requests for Academic Accommodations

The Disabled Students Programs and Services (DSPS) Office is a resource for the general college community for information about and implementation of academic accommodations. DSPS evaluates the need for reasonable accommodations based on student need.

If you need academic accommodations, meet with one of the DSPS Counselors to complete a Support Services Agreement (SSA).

Share information from SSA with your instructor(s). If the instructor agrees, the accommodation is then implemented.

While the right to accommodations is not negotiable, its implementation is. If the instructor questions the implementation, the student, the DSPS Director and the instructor continue to talk until an agreement is reached. *(Note: this may mean that an alternative accommodation may be implemented.)*

If the rare circumstance occurs that no agreement can be reached, the accommodation is temporarily implemented (per Board Policy 533) pending final resolution by the Academic Accommodations Committee.

The Academic Accommodations Committee meets and reviews all information regarding the request. The committee will either approve, deny, or recommend a third accommodation. The decision is then final.

Safety at College of the Redwoods

This section of the catalog is published in accordance with Section 201, P.L. 101-542, the "Crime Awareness and Campus Security Act of 1990."

Crime Reporting Procedures

Security at College of the Redwoods is everybody's business. No community can be totally risk free in today's society. Students, faculty, staff and visitors are partners in creating an environment that is safe and conducive to learning. To that end College of the Redwoods maintains a Public Services/Security Department with personnel available twenty-four hours a day. A person may report any criminal activity or any other emergency at any time, day or night, by dialing extension 4111 from any campus courtesy or office phone. If dialing from a pay phone or off-campus phone, the 476 prefix must be added (476-4111). The Public Services/Security office is located in the main parking lot at the South Entrance to the campus.

Access to Campus Facilities

Most campus buildings are open from 7:00 a.m. until 10:00 p.m. during periods that classes are in session. Individual rooms may be locked due to sensitive contents such as computers, medical equipment, etc., until the arrival of the specific instructor.

Individuals who need to be in campus buildings or areas other than during regularly scheduled work hours should notify their department chairperson or supervisor as well as the campus Public Safety Officer on duty so that they can be checked on for their safety. Several campus rooms are protected by intrusion alarms. Before entering such areas, the Public Services/Security Department should be called.

Campus buildings are normally locked from 5:30 p.m. Friday until 7:00 a.m. Monday. College Public Safety Officers will unlock doors for weekend classes and other events as published in the Facilities Use Schedules which are prepared by Facilities and Grounds.

It is the responsibility of those who use rooms, offices and areas to lock access doors, turn off lights, and close windows. College Public Services and Custodial staff will check the entire campus during off hours, but the primary responsibility lies with the facility user.

Keys are provided to individual staff members on a need-to-enter basis as determined by the appropriate supervisor. Keys are issued by Facilities and Grounds. Lost keys should be immediately reported to one's supervisor, Facilities and Grounds and Security. Keys should never be loaned to other staff members or students. College Public Services/ Security personnel will confiscate any keys which have not been specifically issued to a particular individual. Duplication of District keys is a misdemeanor.

District owned property is not to be removed from the campus without expressed written authorization from the department chairperson or area supervisor. Unauthorized removal of District property from the campus is a violation of the law and may be prosecuted by the District.

Law Enforcement, Security Authority and Prompt Reporting

It is the policy of the College of the Redwoods Board of Trustees to provide reasonable protection to the college community using methods that fit within and contribute to the educational philosophy of the institution. This protection extends to both the users of college facilities, and the facilities themselves. Law enforcement for the campus is provided by the Humboldt County Sheriff's Department who investigates crimes of violence and other felonies. College Public Services/Security provides first response to all crimes reported and investigates minor, or misdemeanor offenses. They report such offenses to the Administration where a determination is made as to possible disciplinary action. Campus Security personnel are not peace officers and do not have the arrest authority of a peace officer. They may perform citizen's arrests on behalf of the College at the request of law enforcement personnel.

College of the Redwoods has a formal memorandum of understanding with the Humboldt County Sheriff's Department to provide investigative and response assistance for violent crimes, or those crimes beyond the capabilities of the Public Services/Security personnel. The Sheriff's Department is called at any time that an arrest is anticipated.

College of the Redwoods also employs student parking enforcement personnel with local training specific to parking enforcement. They are not peace officers. All college personnel are instructed to promptly report criminal or other suspicious behavior to the Public Services/Security Department for investigation. The public is encouraged to do the same.

Crime Prevention

An essential ingredient to any successful crime prevention program is an informed public. It is the intent of College of the Redwoods to inform students and staff, in a timely manner, of any criminal activity or security problems which may pose a threat to their physical safety or the protection of their property. Such information is normally distributed to students through messages posted on kiosks and bulletin boards throughout the campus, and more heavily in the area affected by the activity. Staff members are informed through memos and/or e-mail.

Public training is also a critical element to a campus safety program. Departments within Student Learning Support Services including Student Health, Housing, and Counseling sponsor programs on various topics ranging from sexual assault awareness to substance abuse prevention. Public Services/Security also provides programs suitable for college success classes on general safety, proactive self-protection and crime prevention on campus.

Finally, an effective crime prevention program includes at least some measure of people watching out for one another. All staff and students are asked to be alert, security conscious and willing to be involved. Call the college Public Services/Security staff at extension 4111 whenever you observe suspicious behavior on campus.

Off Campus Crime

The Humboldt County Sheriff's Department provides law enforcement coverage for the areas adjacent to the college campus. While a formal agreement does not exist, the Sheriff's Department provides information concerning serious crime in areas adjacent to the college and such information is disseminated in the fashion described in crime prevention.

Substance Abuse

In compliance with Public Law 101-226, the "Drug Free Schools and Communities Act Amendment of 1989," the Board of Trustees of College of the Redwoods prohibits the unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees on College of the Redwoods property and/or as part of any College of the Redwoods sponsored or sanctioned activity.

Any student or employee in violation of this policy is also in violation of the Student Code of Conduct, and is subject to disciplinary action up to, and including, expulsion from College of the Redwoods, or termination from District employment.

The possession, use and sale of alcoholic beverages by anyone on College of the Redwoods property is a misdemeanor per California Business Code Section 25608 and a violation of the Student Code of Conduct. The use, sale or possession of any illegal drug is a violation of state law and any person found in violation may be subject to arrest by federal, state or local law enforcement authorities.

The decision to take disciplinary action as a result of these violations rests with the President of College of the Redwoods by authority delegated by the Board of Trustees. Criminal prosecution is separate from any administrative discipline that may be imposed by the District.

Sexual Assault Programs and Procedures

College of the Redwoods offers a variety of sexual assault prevention programs through the Student Health Center , Counseling and Housing that address assaults including rape, acquaintance rape, forcible and non-forcible sex offenses. Additionally, the Humboldt County Rape Crisis Center can be contacted at (707) 445-2881 if the individual prefers counseling from an off campus source.

In the event that a sexual assault takes place, Campus Public Services/Security recommends that the following procedures be followed:

1. Campus Security at extension 4111 should be contacted immediately. All campus Public Safety Officers are Emergency Medical Technicians (EMT's), and as such will provide advice on procedures and notifications.

(continued)

2. Those assaulted should not bathe or shower until after they are seen at an emergency room or by a physician. This is critical to preserving DNA evidence.
3. Those assaulted may decide to have the assault investigated by the local law enforcement agency (the Humboldt County Sheriff if the assault takes place on campus). The Public Safety Officer on duty, or any other college employee involved at the time the report is made, will assist the student in contacting the appropriate agencies for law enforcement response and/or counseling.
4. To facilitate the assailant's arrest and prosecution, it is important to provide all known information regarding the assault to the law enforcement officer or Public Safety Officer responding, including the name or description of the person responsible, the location of the assault, the circumstances involved and any other details requested.
5. Students involved in a sexual assault case may request a change in their classroom and/or living situations on campus; the college will accommodate such requests when it is determined that it is feasible and reasonable to do so.
6. Be aware that all parties involved in sexual assault cases are entitled to have others present during a disciplinary proceeding. The parties will be kept informed of the college's final determination with respect to the sex offense, including any sanction that is imposed against the accused.

Photo: Bob Hamilton

COLLEGE OF THE REDWOODS CAMPUS CRIME STATISTICS

The "Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act," hereafter referred to as the "Clery Act," requires the publication and distribution of statistical data on selected crimes and incidents. This publication is intended to meet the requirements of that Federal law. These statistics represent *alleged* criminal offenses *reported* to our local security personnel. Therefore, *these data do not necessarily reflect prosecutions or convictions for crime.*

On-Campus	2000	2001	2002
Murder/Non-negligent manslaughter	0	0	0
Forcible sex offenses	0	0	0
Non-forcible sex offenses	0	0	2
Robbery	0	0	0
Aggravated Assault	2	2	0
Burglary	2	1	4
Motor Vehicle Theft	1	1	0
Arson	3	0	0
Negligent Manslaughter	0	0	0

Note: The following statistics are also included in the on-campus statistics above.

On-Campus, In Residence Halls	2000	2001	2002
Murder/Non-negligent manslaughter	0	0	0
Forcible sex offenses	0	0	0
Non-forcible sex offenses	0	1	1
Robbery	0	0	0
Aggravated Assault	1	2	0
Burglary	0	1	0
Motor Vehicle Theft	0	0	0
Arson	0	0	0
Negligent Manslaughter	0	0	0

Even though institutions are not required to report statistics for all types of criminal offenses, hate offenses and arrests that occurred in non-campus buildings and on public property, College of the Redwoods has chosen to provide to the public the statistical data we have available about these incidents.

Non-Campus Buildings	2000	2001	2002
Murder/Non-negligent manslaughter	0	0	0
Forcible sex offenses	0	0	0
Non-forcible sex offenses	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	0	0	0
Motor Vehicle Theft	0	0	0
Arson	0	0	0
Negligent Manslaughter	0	0	0

Public Property	2000	2001	2002
Murder/Non-negligent manslaughter	0	0	0
Forcible sex offenses	0	0	0
Non-forcible sex offenses	0	0	0
Robbery	1	0	0
Aggravated Assault	1	0	0
Burglary	0	0	0
Motor Vehicle Theft	0	0	0
Arson	0	0	0
Negligent Manslaughter	0	0	0

While reporting data from some non-police sources such as psychological counselors, clergy, etc., is completely optional, a security department is also a non-police source. **The following statistical data are also included in the "On-Campus" section.**

Non-Police	2000	2001	2002
Murder/Non-negligent manslaughter	0	0	0
Forcible sex offenses	0	0	0
Non-forcible sex offenses	0	1	1
Robbery	0	1	0
Aggravated Assault	2	2	0
Burglary	2	1	4
Motor Vehicle Theft	1	1	0
Arson	0	0	0
Negligent Manslaughter	0	0	0

Hate Offenses:

Criminal offenses that manifest evidence of prejudice based on race, religion, sexual orientation, gender, disability or ethnicity that can be classified as a Hate Crime as prescribed by the Hate Crime Statistics Act (28 USC 534) are reported here.

On-Campus	2000	2001	2002
Murder/Non-Negligent manslaughter	0	0	0
Aggravated Assault	0	0	0
Forcible sex offenses	0	0	0
Arson	0	0	0
Negligent manslaughter	0	0	0
Simple Assault	0	0	0

On-campus, In Residence Halls	2000	2001	2002
Murder/Non-Negligent manslaughter	0	0	0
Aggravated Assault	0	0	0
Forcible sex offenses	0	0	0
Arson	0	0	0
Negligent manslaughter	0	0	0
Simple Assault	0	0	0

Photo: Bob Hamiltom

Photo: Bob Hamiltom

Non-campus Buildings	2000	2001	2002
Murder/Non-Negligent manslaughter	0	0	0
Aggravated Assault	0	0	0
Forcible sex offenses	0	0	0
Arson	0	0	0
Negligent manslaughter	0	0	0
Simple Assault	0	0	0

Public Property	2000	2001	2002
Murder/Non-Negligent manslaughter	0	0	0
Aggravated Assault	0	0	0
Forcible sex offenses	0	0	0
Arson	0	0	0
Negligent manslaughter	0	0	0
Simple Assault	0	0	0

Arrests & Disciplinary Actions

College of the Redwoods Public Safety Officers are members of a security department and are not sworn police officers. They do not have arrest authority. On the rare occasion that someone must be arrested on campus, those arrests are performed by the Humboldt County Sheriff's Department and would be included with their statistical data.

Data related specifically to College of the Redwoods follows:

On-Campus Arrests	2000	2001	2002
Liquor law violations	0	0	0
Drug law violations	0	0	0
Illegal weapons possessions	0	0	0

On-Campus Disciplinary Actions/Judicial Referrals	2000	2001	2002
Liquor law violations	35	20	54
Drug law violations	25	44	33
Illegal weapons possessions	0	0	1

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College of the Redwoods

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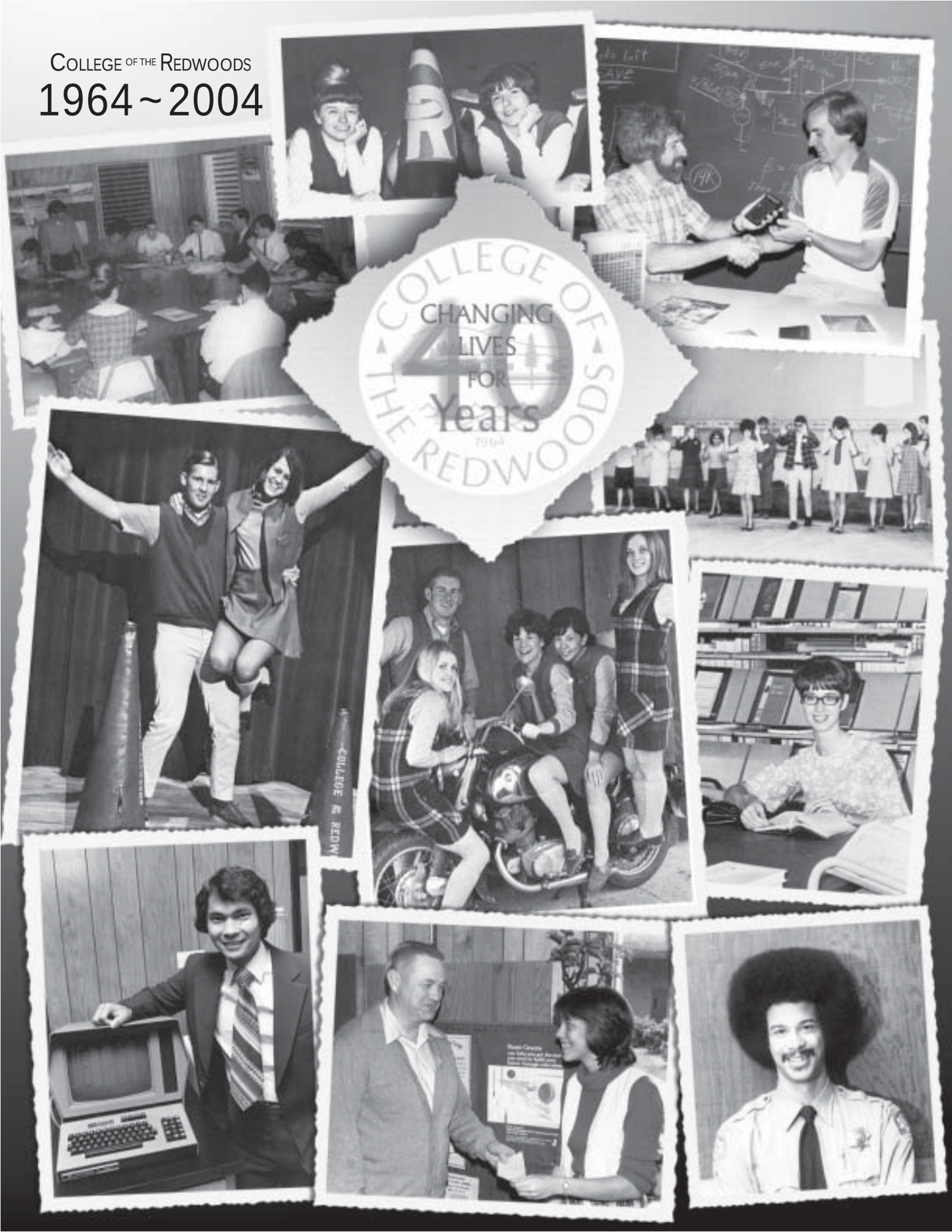

CATALOG COVER

CR ... Your Community College ...
Changing Lives for 40 Years.

Hair and clothing styles will change over a 40 year period, but CR's mission as a "Learning College" hasn't changed. Student success is the primary goal and life-long learning is actively encouraged for the staff and faculty, as well as students. Fashion styles change over time, but education is timeless.

2004-2005 CATALOG CREDITS

PRODUCTION:
College of the Redwoods Printing Services,
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