PHILOSOPHY

This Community College is dedicated to the worth and dignity of each student. Its primary responsibility is to the goals of the student, his needs, desires, and aspirations.

We believe an effective education teaches that one has a life to live as well as a living to earn. Columbia Junior College will, therefore, involve each student in opportunities for developing his capabilities to become a useful and contributing member of society. This objective will be accomplished through a living, dynamic, and continuing experience in which each individual can confront opportunities to participate actively in the learning process. In effect, education will not happen to him, but with him and by him.
August 1 .......... Application for Admission and Transcripts for Day Students Should Be On File
August 27 ........ Beginning Advisement for New and Former Students for Fall Quarter
September 11-12 . Registration for Fall Quarter
September 17 .... Instruction Begins
September 21 .... Last Day to Enter a Class
September 28 ... Deadline for Filing Intent to Graduate for Fall Quarter
October 22 .... Veterans' Day Holiday
November 5 .... Beginning Advisement for Continuing Students for Winter Quarter
November 22-23 ... Thanksgiving Holiday
December 4-5-6 . Final Examinations
December 11- January 1 .... Christmas Recess

WINTER QUARTER 1974

November 1 .......... Application for Admission and Transcripts for Day Students Should Be On File
November 19 .... Beginning Advisement for New and Former Students for Winter Quarter
December 7, 10 . Registration for Winter Quarter
January 2 .... Instruction Begins
January 8 .... Last Day to Enter a Class
January 11 .... Deadline for Filing Intent to Graduate for Winter Quarter
February 12 .... Lincoln Day Holiday

SPRING QUARTER 1974

March 1 .......... Application for Admission and Transcripts for Day Students Should Be On File
March 18 .... Beginning Advisement for New and Former Students for Spring Quarter
March 27-28 .... Registration for Spring Quarter
April 1 .... Instruction Begins
April 5 .... Last Day to Enter a Class
April 12 .... Deadline for Filing Intent to Graduate for Spring Quarter
May 27 .... Memorial Day Holiday
June 3 .... Beginning Advisement for Continuing Students for Fall Quarter
June 14, 17, 18 . Final Examinations
June 19 .... Commencement

SUMMER SESSION 1974

July 1 .... Instruction Begins
July 3 .... Last Day to Enter a Class
July 4 .... Independence Day Holiday
August 2 .... Five Week Summer Session Ends
August 9 .... Six Week Summer Session Ends
June 24 ....
September 13 .... Twelve Week Summer Session Ends
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A Guiding Principle...

Each student is a separate and unique individual who shall be accepted as such. It shall be the responsibility of each student and staff member to accept and perpetuate the philosophy of this College.
QUESTIONS OF INTEREST

Who May Attend Community College?
By State law, community colleges are open to high school graduates and other persons 18 years of age or older who can profit from instruction.

Am I Eligible to Attend Columbia Junior College?
Any legal resident of the Yosemite Junior College District is eligible to attend Columbia Junior College. All persons 18 years of age and older have the legal right to establish their own residence for purposes of admission.

Students living in an area not affiliated with a community college district are eligible to attend Columbia.

Residents of other community college districts may attend Columbia when they have obtained an attendance permit from their community college district of residence. (Page 16)

May International Students Attend Columbia?
Yes, Columbia welcomes international students provided they have proper visas, show financial responsibility, and meet other educational requirements. (Page 18)

Why Should I Read the College Catalog?
The catalog is the official document of the College. It sets forth policies, rules, and regulations of the institution. It is a guide for the services available to the student, provides information about the College, suggestions for course planning in order to determine graduation requirements, and descriptions of all courses.

Catalogs may be purchased from the Manzanita Bookstore.

Which Catalog May I Follow?
Generally, you will follow the catalog in effect at the time of admission. However, you may choose to follow requirements of any subsequent catalog in effect during your enrollment at Columbia Junior College.

Are There Tuition Costs at Columbia?
There is no tuition fee for California residents.

Nonresidents of California are required to pay an out-of-state tuition fee of $18.00 per unit. Students will be charged for no more than a maximum of 15 units each quarter. International students are required to pay tuition fees on the same basis as out-of-state students.

How Much Will Books and Supplies Cost at Columbia?
Cost of books and educational supplies varies with the type of program the student is pursuing. Textbook and supply costs normally range from $50 to $75 per quarter. Some programs may be more expensive, others less.

Why Are Textbooks and Educational Supplies So Expensive?
The cost of educational supplies like most other products has risen sharply in recent years. Reflected in the cost of textbooks is the amount of scholarly effort that has gone into its production, the frequency with which it must be revised and its limited circulation.

How Can I Regain Some of My Textbook Investment?
The College-operated Manzanita Bookstore will buy back certain textbooks which will be reused in courses the following quarter. The trade-in price will depend on the condition, original cost, and resale value.

Does the Bookstore Make a Profit?
The Manzanita Bookstore is not in business to make a profit. Its function is to provide textbooks and quality educational supplies at the lowest possible price for students and faculty of Columbia Junior College. The cost of textbooks and supplies is primarily dictated by the firms that supply these materials. Any profits that may accrue from the bookstore operation are allocated to support student services and activities.

Are There Any Other Educational Expenses?
Again, this depends upon the type of program undertaken. Certain classes may assess special fees for consumable items such as materials used in welding, science, or art courses. Other classes may require insurance and/or special clothing such as some physical education classes. Special activity or field trip classes may require additional expenses. A health fee is assessed all day students each quarter. All fees are non-refundable and are due at the time of registration. These fees are indicated in the class schedule for each quarter.

What Kind of Living Accommodations Are Available?
There are no residence halls or dormitories on the campus at this
time. Students must make their own arrangements for housing within the community. Listings of rooms, apartments, and houses are posted in the Admissions and Records Office.

**How Much Should I Pay for Living Expenses?**

The following cost breakdown for 9 months is used as a guide for single students:

<table>
<thead>
<tr>
<th>Required Fees</th>
<th>$ 50.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books and Supplies</td>
<td>$150.00</td>
</tr>
<tr>
<td>Meals and Housing</td>
<td>$1,100.00</td>
</tr>
<tr>
<td>Personal Expenses and Transportation</td>
<td>$800.00</td>
</tr>
</tbody>
</table>

**Total**: $2,100.00

**Will There Be Bus Transportation to the Campus?**

Bus transportation is provided to students along routes in Tuolumne and Calaveras Counties. Information concerning bus schedules may be obtained in the Admissions and Records Office.

**Are College Classes Available In Locations Other Than On The Campus?**

The College, in an endeavor to meet student needs, offers a wide variety of classes in many locations throughout the community. These classes may meet in non-conforming facilities.

**Are Scholarships or Student Loans Available?**

Several scholarships, grants and student loans have been established. As more civic groups and organizations realize the need, it is anticipated additional loans and scholarships will become available.

Contact the Counseling Office for further information. (Page 23)

**Where Can I Find Out About Job Placement?**

The Financial Aids and Placement Office maintains a list of job vacancies for students. This includes jobs reported by local employers and vacancies for student help on campus. On-campus jobs may include positions as library, bookstore, groundsman and laboratory assistants and part-time clerical helpers for College offices and faculty. (Page 23)

**How Can A Counselor Assist Me?**

Counselors are available. Services include assisting students with schedules, personal problems, housing, financial assistance, scholarships and general scholastic progress.

**Who Is My College Advisor?**

Your college advisor is a faculty member who can help you design your program of study, assist in quarterly course planning and is available to discuss your academic progress throughout your tenure at Columbia.

**How Will My Advisor Be Selected?**

Your college advisor will be assigned on the basis of your intended program of study. Major advisors are selected on the strength of their experience in a particular specialty. They may have pursued a similar major, or they may have other experience in the field of study.

**What Is a College Major?**

The college major is a suggested course of study for the attainment of special knowledge for an occupational or transfer study program. The major is designed to provide the necessary skills and information for the achievement of your individual educational goals.

**Must I Select a Major?**

You need not select a major prior to starting at Columbia Junior College. However, because many professional and occupational programs require specialized courses of study, it is desirable to select the major as soon as possible.

**Who Will Help Me Select a Major?**

If you have an idea about the occupation you would like to follow, the counselors or advisors can help you decide upon the most suitable major course of study. In the event you have not made any decisions, it is suggested you discuss your program with the counselors.

**What If I Decide to Change My Major?**

The choice of a college program of study and major is a decision to be made by the individual student. No one will insist you pursue a given major course of study. If you decide to change your major, talk with your advisor, and he will make suggestions as how to best pursue your goals.
What Are Transfer Courses?
Courses designed for transfer to California State Universities and Colleges and the University are numbered from 100 to 199. Courses numbered below 100 also may be accepted by colleges where agreements are in effect. If you know to which college you intend to transfer, it is wise to obtain a current catalog from that college. Your course of study at Columbia should be designed to coincide with that transfer institution. Your advisor can help you if you have questions. (Page 41-46)

What Is a Prerequisite? Why Do Some Classes Have Prerequisites?
A prerequisite is a requirement prior to entering certain courses. Prerequisites are intended to ensure you have sufficient preparation before entering a course to allow for a reasonable chance of success. (Page 28)

May Students Take Both Day and Evening Classes?
Classes are scheduled during day and evening as part of the total College program. Any student may select courses from the Schedule of Classes regardless of time of day the course is offered.

Can I Get Help With Reading, Study Skills Problems?
There are two ways to get such help:
1. You can enroll in a 2-unit course called Reading 21, Developmental Reading (Page 99) which is designed to improve your study skills and reading abilities, or
2. You can pursue a 1-3 unit independent study program which concentrates on your specific needs, e.g., speed reading, vocabulary improvement, how to study the social sciences, etc.

More information will be provided at the Learning Skills Center in the Learning Resources Building.

Is Career Information Available?
The college maintains a career information library to assist students in planning their career goals. Counselors are also available to assist in career guidance.

Is There a Student Association?
All students are members of the Associated Students of Columbia Junior College and they in turn develop a student government. Student Government is a representative group of students which is responsible for the conduct of student affairs, coordinates the social activities of campus organizations, sponsors educational and recreational opportunities, and serves as spokesman for the student body. The government is developed to fit the needs of the students at that particular time.

Are There Student Activities?
The College philosophy states that the type and extent of student activities should be developed by the student body rather than by the College. Clubs, discussion groups, or committees may be created by individual student initiative through mutual involvement of the Student Government and College staff consistent with district policy and College procedures. Columbia is your community college and will be responsive to your interests.

Why Should I Become Active in Student Affairs?
There are a number of reasons for becoming active in student affairs. College life should be a time of becoming aware of your society and developing an involvement with your society. Columbia is your school, and the more you become active in your school affairs the more Columbia becomes the kind of institution you want to attend. The faculty looks to the student body for the types of student activities desired.

How Can I Go About Starting a Student Activity?
First of all, you should discuss your ideas with your fellow students, formulate a plan that you would like to see in operation at Columbia, take it to any faculty member (you may want to orient your activity to the interests of a particular faculty member), and he will help you inaugurate a sound program. You are urged to pursue the development of important co-curricular activities and become personally involved.

Does the College Have Inter-Collegiate Athletics?
Columbia Junior College is a member of the Pacific Coast Inter-Collegiate Ski Conference. Competition is offered in the Alpine and Nordic events. Conference members include University of California at Berkeley, University of California at Davis, Stanford University, University of Nevada, Menlo College, College of the Siskiyous, Sierra College, and Feather River College.
A Guiding Principle...

This College shall provide a focus on learning as an individual process that can best be accomplished through active involvement in a setting of reality. It shall be recognized that learning is a logical outgrowth of experiences that are meaningful to each student and not the rote acquisition of a specific body of knowledge.
ADMISSIONS

Eligibility
Graduates of accredited high schools or persons 18 years of age or older who are able to profit from instruction and who meet the residence requirements are eligible for admission to Columbia Junior College.

Admission with previously earned credits will be granted upon evidence of official transcripts showing satisfactory scholarship and an unqualified honorable dismissal from an accredited college.

Residence Requirements
Due to the passage of the Priolo Act, all persons 18 years of age and older have the legal right to establish their own residence for purposes of admission.

A statement verifying legal residence is required to be filed with the College prior to initial registration. A student is qualified to attend Columbia Junior College if he meets one of the following residence requirements:

1. Is a legal resident of the Yosemite Junior College District with a local address.
2. Is a legal resident of a California high school district not affiliated with a community college district.
3. Is a legal resident of another California community college district and presents a proper permit from that district to attend Columbia Junior College.
4. Is a student whose legal residence is in another state and pays the out-of-state fee.
5. Is an international student who complies with special admission requirements and pays the nonresident fee.

Interdistrict Attendance Permits
The Yosemite Junior College District, under the provisions enacted by the 1965 Legislature of the State of California, has issued a Notice of Restriction of Attendance to each community college district in the State.

Students residing in other community college districts may attend Columbia Junior College under specific terms of interdistrict attendance agreements. Agreements may be negotiated and permits issued when it is demonstrated to be in the best interest of the student or necessary for his educational objectives to attend a college other than in his district of residence.

Admission Procedures
Students who desire admission to Columbia Junior College are to complete and return application forms to the College Admissions and Records Office. Application forms are available from Columbia Junior College or high school counselors in the Yosemite Junior College District.

Before admittance, official transcripts for all previous college work must be received by the College. If no transcript is available due to withdrawal, an official letter stating this fact is required.

It is the student’s responsibility to furnish the College with official documentation for previous college work or training to be evaluated for credit.

Applications should be submitted no later than four weeks prior to the beginning of each quarter. A local address must be supplied before completion of registration.

Notice of Acceptance
New and former day students will be notified officially of their counseling appointment after all application forms and documents have been received. Early counseling is desirable to allow the student a maximum choice of classes.

Schedule of Classes
A Schedule of Classes is the official listing of courses. It is published each quarter of the academic year.

Schedule of Classes contains information regarding registration dates and special instructions for registering in classes.

The College reserves the right to make additions or deletions to the Schedule of Classes. Any class in which the enrollment is too small to justify continuance may be cancelled.

Accident Insurance
Insurance coverage is required in a few selected classes where the type of activity is such as to make this advisable. Classes
where this requirement is in effect are so designated in course descriptions.

**Late Registration**

The last day to enter a class is the fifth day of instruction of each quarter, except upon approval of the instructor. Late registrants are required to make up course work missed.

**Admission After Disqualification**

A Student disqualified from Columbia or any other college may petition for admission one year after disqualification. If the petition is approved, the student is placed on probation until his cumulative Grade Point Average is 2.0 ("C" average) or above. A student unable to maintain a "C" average may be permanently disqualified. Petitions must be submitted to the Dean of Student Services no later than four weeks prior to the quarter for which admission is being requested.

**Admission of International Students**

In the belief that students from abroad make significant contributions to the college community while preparing for leadership roles in their home countries, Columbia Junior College accepts a limited number of international students each year. The College may restrict the number of international students from a foreign country so that many nations of the world may be represented on the Columbia campus. Students must complete the following requirements before a Notice of Acceptance will be authorized:

1. Submit official transcripts, translated into English, of all high school and college work attempted.
2. Take LADO or TOEFL test if from a non-English speaking country. Results of the test are to be forwarded to Columbia Junior College.
3. Have a physician complete a Report of Medical History and Health Evaluation. The report shall be in English and returned to the College.
4. Purchase a comprehensive accident and health insurance policy. This policy may be obtained through the Admissions and Records Office.
5. Furnish evidence of satisfactory financial support. This may be accomplished by a guarantee of a sponsor residing in the College area.

These requirements must be completed by August 1. A College Counselor serves as advisor to international students.

**Admission of High School Students**

High school students in their junior or senior year, upon written authorization of their principal and approval of the Dean of Instruction may take community college courses. This advanced placement program is designed to introduce motivated high school students to a college environment when, in the judgement of their principal and the Dean of Instruction, the student can profit from the experience. Units earned will apply toward the requirements of a college degree if not used for high school graduation.
A Guiding Principle . . .

The College shall be characterized by its flexibility in meeting student needs. Every facet of the institution shall expect and promote this quality.
STUDENT SERVICES

Student Orientation
An orientation program is presented for incoming students. Information concerning the College's responsibility to the student, the student's responsibility to the College, and student services is discussed.

Orientation programs are informational sessions designed to acquaint students with academic procedures and campus activities, to introduce College staff members, to plan student-faculty meetings, and to outline areas in which students may participate in the College community.

Faculty Advisement Program
Each student will be assigned a faculty advisor to:

1. discuss educational objectives.
2. plan a study program.
3. assist in registration procedures.
4. evaluate academic progress.

The advisement program is an on-going service and students are encouraged to meet with their advisors frequently.

Scheduled student-advisor conferences are held prior to the beginning of each quarter to allow continuing students an opportunity to plan a program of study for the next quarter.

Testing Services
The College offers testing services to students requiring evaluation of their academic potential, occupational interests, or general ability. Students may be referred for individual or group testing by instructors, advisors, or counselors. Testing services also are available at the Counseling Office upon individual student request.

Columbia Junior College serves as an American College Testing (ACT) Program Center and General Educational Development (GED) Testing Center.

Student Insurance
Broad coverage student health and accident insurance is not carried by the College or District. Students who desire individual protection may make arrangements in the Business Services Office. A list of programs and activities that require approved health and accident insurance may be obtained from the Admissions and Records Office.

Transcripts
Upon request to the Admissions and Records Office, two transcripts will be issued without charge for each student in good standing. Additional transcripts are $1 each. No transcripts will be issued for students who have outstanding financial obligations to the College.

Student Identification Cards
Student Identification Cards should be obtained from the Instructional Materials Center at the beginning of the school year. Student Identification Cards are required for checking out library books and audio visual equipment and materials.

Student Employment
Employers are encouraged to report job openings with the Financial Aids and Placement Office where listings of student employment opportunities are maintained.

Financial Aids
Students who need financial assistance to defray college expenses may be eligible for funds under the College's Work Study Program, National Direct Student Loans, or Educational Opportunity Grants. These funds are administered by the College Financial Aids Office.

Applications for the above funds are required to determine financial need. Besides the College application, the student may submit either the College Scholarship Service form or the American College Testing (ACT) form. These are available in the Financial Aids Office.

Applications for applying for Federally Insured Student Loans may also be obtained in the Financial Aids Office.

Scholarships
To assist students with their college expenses, grants of money are handled through the Columbia Junior College Scholarship
Fund and the Counseling office. Service clubs, community organizations and individuals are encouraged to provide this financial aid and may specify the criteria for their scholarships. Students are encouraged to apply for consideration for scholarships.

Health Services
A variety of health services are available to all day students registered at the College. As part of the enrollment application, students are asked to complete an emergency health card. Students having chronic health problems, however, are advised to inform the College Nurse immediately so that the best possible help may be rendered in case of an emergency. Illness or accidents should be reported immediately to the College Nurse or any administrator. A fee is charged for health services payable at the time of registration.

Transportation
Bus transportation is provided to students along routes in Tuolumne and Calaveras Counties.

Veterans Affairs
Students who are eligible to apply for Federal and State educational benefits for veterans should contact the Financial Aids and Placement Office at the time of registration each quarter.

Student Activities
College life fosters an attitude and a pattern for social and college-community involvement. Student activities are offered to widen horizons of students and develop an awareness of social and public responsibility. The framework of social events, publications, clubs, intramural activities, community projects, musical programs, dramas, campus improvement, recognition honors, seminars, and cultural events is developed through student-faculty interaction.

A program must meet the needs of students to be meaningful. Students interested in planning and developing an activity are encouraged to discuss their ideas with any faculty member. Faculty members may serve as advisors to foster and help the student body in the inauguration of activities. Students are urged to become actively involved in the introduction and organization of activities.
A Guiding Principle . . .

There shall be change with a purpose. Toward this end the College shall seek innovation, support creativity and imagination, while conformity for its own sake will be ignored. It shall consider technological and methodological advances which appear to have promise.
ACADEMIC PROCEDURES

Unit of Credit

A "unit of credit" is earned on the basis of one hour of lecture-recitation per week or three hours of laboratory activity per week during a quarter. It is common to find courses composed of learning activities resulting in combinations of lecture-recitation, independent and tutorial study, or directed and individual laboratory tutorial study, or directed and individual laboratory experiences. In all cases these are to be equated with the unit of credit.

The following terms are synonymous in expressing a unit of credit: quarter unit, quarter hour, class hour, credit and credit hour.

Conversion of Units

To convert quarter and semester units of credit, the following methods of computation are used:

1. Quarter units of credit are converted to semester units of credit by multiplying the number of quarter units by two-thirds.

2. Semester units of credit are converted to quarter units of credit by multiplying the number of semester units by one and one-half.

Prerequisites

Course prerequisites are intended to ensure that the student will have sufficient preparation before entering a course and to assure a reasonable chance for his success. Knowledge of course prerequisites is the student's responsibility.

Where no prerequisite is stated as part of the course description, none is required.

Prerequisites may be waived with the Dean of Instruction's permission when in the instructor's judgement the student has adequate preparation to satisfy the course objectives. An instructor has the prerogative to refuse admission to class or officially drop a student from class who has not satisfied the course prerequisites as published in the College catalog.

Grading System

Evaluation of student achievement is made in relation to the attainment of specific course objectives. At the beginning of a course the instructor will explain the course objectives and the basis upon which grades will be determined.

Once a course is made a part of the student's program of attendance, his achievement in the course will be recorded on his permanent transcript of record by one of the following symbols:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
</tr>
<tr>
<td>D</td>
<td>Passing</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal at any time for not meeting course objectives.</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit</td>
</tr>
<tr>
<td>N</td>
<td>No Grade (Did not meet course objectives; recommend re-enroll in course)</td>
</tr>
<tr>
<td>O</td>
<td>Ungraded Class</td>
</tr>
</tbody>
</table>

Auditing a Course

California Community Colleges do not permit auditing.

Grading Scale

Columbia Junior College uses the following system of grade points in appraising the student's level of achievement:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
</tr>
<tr>
<td>W</td>
<td>Not included in computing grade point average.</td>
</tr>
<tr>
<td>I</td>
<td>Not included in computing grade point average.</td>
</tr>
<tr>
<td>CR</td>
<td>Not included in computing grade point average.</td>
</tr>
<tr>
<td>NC</td>
<td>Not included in computing grade point average.</td>
</tr>
<tr>
<td>N</td>
<td>Not included in computing grade point average.</td>
</tr>
<tr>
<td>O</td>
<td>Not included in computing grade point average.</td>
</tr>
</tbody>
</table>
Grade Point Average

The Grade Point Average — GPA — is determined by the following formula:

\[ \text{GPA} = \frac{\text{Total Grade points earned}}{\text{Total quarter units attempted}} \]

For example, a student who earns 5 units of “A”, 4 units of “B”, 3 units of “C”, 2 units of “D”, and 2 units of “F” would compute his GPA as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Units</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>F</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

\[ \text{GPA} = \frac{40 \text{ grade points}}{16 \text{ units attempted}} = 2.50 \]

The result in this example is a GPA of 2.50.

Units for which a grade of “W”, “N”, “CR”, or “NC” have been assigned are not counted in computing the Grade Point Average.

Repetition of Courses

Courses for which “D”, “F”, “N”, “CR”, and “NC” grades have been earned at Columbia Junior College may be repeated once. When repeating a course in which a “D” or “CR” grade was earned, the new grade and grade points will be recorded, but no additional units for the course will be allowed. When repeating a course in which “F”, “N”, or “NC” grades were earned, the new grade, grade points, and units for the course will be recorded. Courses completed with a grade of “C” or better may not be repeated for the purpose of raising the grade.

Incomplete Grades

An incomplete grade (“I”) may be given for an approved reason if a student does not complete all course requirements. Responsibility for removal of incomplete grades within the time granted by the instructor rests with the student.

Forgiveness of “F” Grades

Any “F” grade recorded on the transcript for the first 45 quarter units of college work attempted will not be included in computing the Grade Point Average for graduation. An “F” grade earned after the quarter in which 45 quarter units of college work are completed will be computed in the grade point average.

99. Independent Study Courses

Independent Study courses are intended to give students an opportunity to independently research specialized areas not available as regular course offerings of the College. Independent Study courses do not appear in the catalog as such since these courses are designed to meet specific student interests. Independent study courses may be made available in any subject matter area. Consult your advisor for specific procedures.

CONDITIONS

To be admitted to Independent Study, a student shall:

1. have completed one quarter (12 units) in residence and have a cumulative Grade Point Average of 2.5 in previous quarter of residency.
2. have written approval of the instructor directing the student’s Independent Study, and written verification by the Admissions and Records Office that the maximum credit limitation for Independent Study will not be exceeded. Maximum unit value for any Independent Study course for any one quarter will be 3 units of credit.

LIMITATIONS

The following limitations apply to Independent Study courses:

1. Registration is restricted to one Independent Study course per quarter and registration must be completed prior to the fourth week of the quarter.
2. An overall maximum of 7 units of credit completed will be allowed for Independent Study.

Students who intend to transfer are advised that Independent Study credit may not fulfill either major or General Education Breadth Requirements. Independent Study credit earned by students not transferring may be evaluated in partial fulfillment of major requirements.

Credit/No Credit

A student may elect to enroll in any course outside his major for credit-no credit. A maximum of 21 “CR” units may be counted toward graduation requirements; however, no more than one
course may be petitioned each quarter with the exception of P.E. 145—Recreational and Intramural Sports and Guidance 101—Career Exploration. A grade of "CR" indicates satisfactory completion of the course, "NC" is unsatisfactory. Credit for a course in which "CR" was earned may be converted to a letter grade by repeating the course or challenging the course by examination. CR/NC units are not computed in determining a student’s GPA. The student must petition a course for CR/NC by the Friday before the final examination period. Petition forms are available in the Admissions and Records Office or from the advisor.

Credit by Examination

A student may challenge a course by examination and obtain credit. Grades and grade points are entered on the student’s transcript of record in the same manner as for regular courses of instruction. The intent of this provision is to:

1. enable students to pursue courses of study at an accelerated rate and to encourage independent study, and
2. recognize training or experience for which credit or advanced standing was not previously granted.

CONDITIONS

In order to challenge a course for credit a student must:

1. be registered in Columbia Junior College at the time the course is being challenged.
2. have completed at least 15 quarter units of work in residence.
3. have a cumulative Grade Point Average of 2.0 ("C" average). Credit by examination may not be granted for courses the student has failed, received a grade of "NC", or as a means to raise a grade. Only Columbia Junior College courses may be challenged by examination. A maximum of 30 units may be earned by Credit by Examination. Units earned by Credit by Examination are not applicable toward fulfillment of the residence requirement.

Credit granted by examination at accredited colleges will be accepted; such credit will be included in the maximum allowed by examination.

PROCEDURES

Petitions for Credit by Examination must be obtained from the student’s Advisor, approved by the instructor giving the examination, and endorsed by the Dean of Instruction.

The Instructor will outline the course requirements and schedule the examination.

The petition must be filed in the Admissions and Records Office during registration and the course will be recorded as part of the student’s regular program for that quarter.

The examination will be completed during the fourth week of the quarter.

PREVIOUSLY EARNED CREDITS

College Credit

Previously earned lower division college or university units will be accepted if the institution was accredited by a recognized accrediting association when the student was in attendance. A maximum of 15 quarter units will be allowed for courses taken by correspondence from accredited institutions.

Credit for Military Service

Armed forces personnel or veterans with a minimum of one year of service and an honorable discharge will receive:

Military Service

Three quarter units.

Military Service Schools

Credit for military service schools in accordance with credit recommendations published by the American Council on Education.

United States Armed Forces Institute (USAFI)

Credit for certain USAFI lower division college-level courses. Provisions for granting credit to armed forces personnel and veterans are subject to the following conditions:

1. At least 15 quarter units of work must be completed at Columbia Junior College before a student may receive credit.
2. Credit will not be granted for military service or military service schools where comparable units have been earned in courses previously taken.
3. The maximum credit allowable is 30 ungraded quarter units. Credit granted to armed forces personnel and veterans by another institution is subject to re-evaluation by Columbia Junior College.
Student Load
A student who desires to carry more than 17 units must secure approval from his advisor.
Students on academic probation will be limited to a unit load recommended by their advisor.

Classification of Students
While the minimum full-time program that will qualify a student for graduation in two years is 15 units per quarter, the following classifications have been established:
- Full-time — registered for 12 or more units.
- Freshman — fewer than 45 units completed.
- Sophomore — 45 or more units completed.

Adding a Course
Adding a course or adding units to a course in which a student is already enrolled is permitted during the first five days of instruction each quarter. After the fifth day of instruction courses or units may not be added without consent of the instructor.

Dropping a Course
A student may drop a course or reduce the number of units in a course during the first three weeks of instruction. The course or units will be removed from his program of attendance without a grade being recorded.
A grade of "W" will be recorded when the student withdraws from a course or the college at any time prior to the scheduled final examination for the course.

Attendance
Attendance is the student's responsibility. There are no provisions for "cuts."
An instructor has the prerogative to lower a student's grade or drop a student from course because of excessive absence.
Absence from the first class meeting may cancel registration in the course.

Final Examinations
Final examinations are held at the end of each quarter. Students are responsible for taking final examinations at the time scheduled unless prior arrangements are made with the instructor.
Final grades are considered permanent and may be changed by the instructor only in case of error.

Scholastic Honors
Graduating students who have earned a cumulative Grade Point Average of 3.5 or better in all college work are awarded the Associate in Arts degree With Distinction.
Students whose cumulative Grade Point Average is between 3.3 and 3.5 are awarded the Associate in Arts degree With Honors.
Each quarter a list of student names is published to recognize scholarship in at least 12 units of work. Students whose grade point average is between 3.0 and 3.74 are acknowledged on the Dean's List.
Students whose grade point average is between 3.75 and 4.0 are recognized as Scholars of Distinction by the President.

Scholarship Reports
Grade reports are made after the end of each quarter. If the student wishes to obtain a current progress report, he should initiate such a request in the Admissions and Records Office.

Satisfactory Scholarship
A student whose cumulative Grade Point Average is 2.0 ("C" average) is scholastically in "good standing."
All units and grade points are counted on a cumulative basis. The method for computing the Grade Point Average is illustrated on page 30.
A student with a Grade Point Average less than 2.0 is doing unsatisfactory work and is subject to academic probation or disqualification.

Academic Probation
The purpose of academic probation at Columbia Junior College is to ensure that students who are deficient in scholastic achievement will receive special advisement.
A student whose cumulative Grade Point Average falls below 2.0 at the end of any quarter will be placed on academic probation.

Status While on Probation
Probationary students will be limited to a unit load recommended by their advisor.
Students who have attempted 45 quarter units or three quarters as a full-time student and whose percentage of "W"s is 30% or more will be placed on probation.
Students on probation are subject to disqualification at any time their academic work shows neglect of studies.
Removal From Probationary Status

Clear status will be granted to a student on probation when his cumulative Grade Point Average is 2.0 or better.

Disqualification

A student on academic probation may be disqualified under either of the following conditions:
(1) Completion of a second quarter on probation with a cumulative Grade Point Average below 1.75.
(2) Completion of a third quarter on probation with a cumulative Grade Point Average below 2.0.

A student who earns a Grade Point Average of less than 1.0 in any quarter may be disqualified without a period of probation.

A disqualified student may not be reinstated under the admissions provisions until one year from the date of disqualification.

If the Grade Point Average of a student readmitted after disqualification falls below 2.0 for a quarter's work, the student may be permanently disqualified.

In the event a student is disqualified, he may petition for readmission on the basis of the following circumstances that might warrant an exception:
(a) Evidence of consistent improvement in the student's record during the quarters under consideration.
(b) A change from one major to a field of study more appropriate to the student.
(c) Circumstances in the personal life of the student which the advisor of the student believes may have been of sufficient gravity to affect adversely the performance of the student.
(d) The recommendation of the student's physician that the continuance in college would be of sufficient therapeutic benefit to the student to warrant the granting of an additional opportunity.

If a student has been disqualified and feels he has extenuating circumstances worthy of consideration, he may request the Dean of Student Services to waive the one year period of disqualification.

Conduct

A Code of Student Conduct was adopted by the Yosemite Junior College District Board of Trustees January 6, 1970, based on the following philosophical concept:

The students and faculty at Columbia form a closely knit educational community which is engaged in the process of learning through involvement. Regulations are needed, but the broader concept of personal honor is based on integrity, common sense, and respect for civil and moral law.

The College expects its students to conduct themselves as responsible citizens both on and off the campus. Recognizing the students' responsibilities as individuals, it is the policy of the College not to discipline students for acts occurring away from the campus and not connected with College-sponsored activities.

Leave of Absence

An emergency leave of absence not to exceed two weeks may be granted. Petitions for leave of absence are available in the Admissions and Records Office.

Students are responsible to make arrangements with their instructors to complete all course work missed.

Absences of less than one week need not be reported to the College.

Withdrawal From College

It is the student's responsibility to officially withdraw from the college and notify the Admissions and Records Office so that a grade of "W" may be recorded on the permanent record.

Residence Requirement for Graduation

To be eligible to receive the Associate in Arts degree from Columbia Junior College, a student must:
(1) complete at least 15 quarter units of work at a campus of the Yosemite Junior College District, and
(2) be registered in Columbia Junior College during the quarter in which graduation requirements for Columbia Junior College are completed.

Materials and Breakage Costs

In some classes materials and breakage costs must of necessity be borne by the students. Generally, these costs are assessed in those kinds of classes where the materials used become the property of students at the termination of the class. Refer to schedule of classes.
A Guiding Principle...

This College shall focus on student success. This will be accomplished by preserving an environment where each individual will have maximum freedom of choice. It will afford each student an opportunity to profit from education to the fullest extent of his capabilities.
GRADUATION REQUIREMENTS

Columbia Junior College will confer the Associate in Arts degree upon completion of the following requirements:

TOTAL UNIT: Satisfactory completion of 90 quarter units selected from courses listed in the catalog provided that 15 hours of the required units were secured in residence at a campus in the Yosemite Junior College District and registration in Columbia Junior College during the quarter in which graduation requirements for Columbia Junior College are completed.

SCHOLARSHIP: A cumulative Grade Point Average of 2.0 ("C" average).

MAJOR: Satisfactory completion of 30 quarter units of study taken in a discipline or in related disciplines.

GENERAL EDUCATION: Satisfactory completion of 23 quarter units of General Education selected from the four categories listed below. A minimum of 3 quarter units must be taken in each category and not more than 9 quarter units in any one category may be counted toward meeting the General Education Requirements.

Any course listed below which is taken to meet the major requirement may also be used to meet the General Education Requirement within the appropriate category.

A. HUMANITIES
   - Art 101, 110a, 110c
   - Music 102, 110a, 110c
   - English 101b, 101c, 117a, 117b, 146a, 146b, 149
   - Speech 102, 122
   - Drama 130, 133a, 133b, 133c, 170, 171, 172
   - Philosophy 101a, 101b, 101c, 105, 110
   - Humanities 110
   - French 101a, 101b, 101c
   - Spanish 101a, 101b, 101c

B. SOCIAL SCIENCES
   - Anthropology 101a, 101b, 101c, 104, 110a, 115
   - Business 101, 103a, 103b, 110
   - Crime Prevention 100a, 100b
   - Economics 15, 101a, 101b, 101c
   - History 104a, 104b, 104c, 111, 113, 117a, 117b, 121a, 121b, 133, 149
   - Philosophy 101a, 101b, 101c, 105, 110
   - Political Science 101, 105, 110, 115, 125
   - Psychology 101, 102, 103, 130, 141, 142a, 142b, 143, 144, 145, 146, 147a, 147b, 160
   - Health Education 101
   - Sociology 101a, 101b, 110, 111, 112, 115, 119

C. NATURAL SCIENCES
   - Biology 10, 100, 110, 111, 115, 120, 121, 130, 131, 151, 155
   - Chemistry 100, 101a, 101b, 101c, 121a, 121b
   - Earth Science 100a, 100b, 110a, 110b, 120, 122
   - Forestry Technology 12
   - Natural Resources 100, 101, 102
   - Natural Resources Technology 11, 12
   - Physics 115a, 115b, 115c
   - Forestry 100, 102
   - Health Occupations 1a, 1b, 1c, 1d

D. LEARNING SKILLS
   - English 51a, 51b, 101a
   - Speech 101, 115
   - Office Occupations 20

Philosophy 110
Business 105
Skills Development 21, 60, 70, 80, 90
Mathematics 30, 30.1, 30.2, 30.3, 32, 33, 51, 101, 102, 103, 105, 105.1, 105.2, 105.3, 105.4, 120a, 120b, 120c, 120d, 120e

*These Philosophy courses may be counted toward meeting the General Education Requirements under either Humanities or Social Science but not both.

NOTICE OF INTENT TO GRADUATE: A Notice of Intent to Graduate must be filed in the Admissions and Records Office during registration no later than the second week of the quarter in which the student plans to complete his requirements for graduation.

Graduation requirements may be completed during any quarter. Degrees are conferred at graduation exercises at the close of the Spring Quarter.

Armed forces personnel or veterans with a minimum of one year of service and an honorable discharge may petition for credit under the provisions for Previously Earned Credits listed on page 33.

LOWER DIVISION REQUIREMENTS
CALIFORNIA FOUR-YEAR COLLEGES AND UNIVERSITIES

Students should consult the latest catalog of the institution to which they intend to transfer to ensure that all required lower division courses are included in their Columbia program of study.

Advisors will help students select courses that fulfill both major and General Education Breadth Requirements. The responsibility for fulfilling requirements rests with the student.

ASSOCIATE IN ARTS DEGREE FOR STATE UNIVERSITY AND COLLEGE TRANSFER

The California State University and College system has established the following campuses:

California State College, Bakersfield
California State University, Chico
California State College, Dominguez Hills
California State University, Fresno
California State University, Fullerton
California State University, Hayward
California State University, Humboldt
California State University, Long Beach
California State University, Los Angeles
Students may complete their lower division preparation for transfer to one of the state universities or colleges without loss of credit or grades.

Students should make their choice of transfer institution early and consult the catalog of the transfer college. Each state university and college has its own academic emphasis and program requirements.

A student who is eligible for direct admission to a state university or college from high school may transfer after he has completed 90 quarter units with a cumulative Grade Point Average of 2.0 ("C" average) or better.

Students should consider the following if they plan to transfer to a state university or college:

1. General Education Breadth Requirements: State universities and colleges require a minimum of 60 quarter units of general education for a Bachelor's degree.

2. Department Requirements: Students should refer to the transfer university or college catalog to identify any special lower division major requirements.

3. Minor Requirements: In many programs a minor is required. Students should consult the transfer university or college catalog to include lower division courses which may be required for upper division work in a minor.

To earn the Associate in Arts degree and enter a state university or college with junior standing, a student should complete at least 90 quarter units with a cumulative Grade Point Average of 2.0 ("C" average) or better. A maximum of 105 quarter units of junior college credit will be accepted by a state university or college. Units in excess of 105 may be applied toward fulfillment of requirements in General Education Breadth Requirements, the major, or the minor.
History 117a, 117b. History of the United States (5) (5)

B. Psychology (one course).
   Psychology 101. General Psychology (5).
   Psychology 102. Experimental and Biological Psychology (5).
   Psychology 103. Social Psychology (5).
   Psychology 130. Personal and Social Adjustment (5).
   Psychology 142a, 142b. Psychology of Leadership (5) (5).

C. Additional Social Sciences (one course).
   Anthropology 101a, 101b, 101c. Introduction to Anthropology (5) (5) (5).
   Anthropology 115. Indians of North America (5).
   Economics 101a, 101b, 101c. Principles of Economics (3) (3) (3).
   History 104c. History of Civilization (4).
   History 121a, 121b. History of California (3) (3).
   History 149. The Mother Lode (3). (or Humanities)
   Political Science 105. Introduction to Political Science (4).
   Political Science 110. American Political Thought (4).
   Political Science 115. International Relations (4).
   Political Science 125. Comparative Political Systems (4).
   Sociology 101a, 101b. Introduction to Sociology (5) (5).
   Sociology 112. Sociology of the Family (5).

HUMANITIES

A. Literature, History and Philosophy (one course).
   Drama 133a, 133b, 133c. Theatre Background (4) (4) (4).
   English 117a, 117b. Literature of the United States (5) (5).
   English 146a, 146b. Survey of English Literature (5) (5).
   English 149. California Literature (5).
   History 104a, 104b. History of Civilization (4) (4).
   History 111. Introduction to Asian History (4).
   History 113. Introduction to History of China (4).
   History 149. The Mother Lode (3). (or Social Sciences).
   Humanities 110. Current Religious Movements (3).
   Philosophy 101a, 101b, 101c. Introduction to Philosophy (4) (4) (4).
   Philosophy 105. Perspectives in Philosophy (4).
   Philosophy 110. Introduction to Logic (4).

B. Fine Arts (one course).
   Art 101. Art Appreciation (3).
   Art 110a. History of Art: Ancient and Medieval (3).
   Art 110b. History of Art: Renaissance and Baroque (3).
   Art 110c. History of Art: 19th and 20th Century (3).
   Drama 130. Drama Appreciation (3).
   Music 102. Introduction to Music (4).
   Music 110a, 110b, 110c. Survey of Music History and Literature (4) (4) (4).
   Speech 102. Oral Expression and Interpretation (5).

BASIC SUBJECTS

A. Communications (all courses).
   English 101a, 101b, 101c. Reading and Composition (3) (3) (3).

ADDITIONAL REQUIREMENTS

A. Electives: additional units to complete the 60 units of General Education Breadth Requirements may be selected from courses listed in the above categories or any of the following:
   1. Math (Math 101 or above)
   2. Foreign Language (other than Spanish 100abc)
   3. Health Education 101
   4. Physical Education

TOTAL GENERAL EDUCATION BREADTH REQUIREMENTS 60 units.

ASSOCIATE IN ARTS DEGREE FOR UNIVERSITY OF CALIFORNIA TRANSFER

The University of California has established campuses at Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, San Francisco, Santa Barbara, and Santa Cruz.

To earn the Associate in Arts degree and enter the University of California with junior standing, a student should complete at least 90 quarter units with a cumulative Grade Point Average of 2.0 ("C") or better.

The University will not grant credit toward graduation for work completed in excess of 105 lower division quarter units.

A student eligible for direct admission to the University from high school may transfer at the end of any quarter with a cumulative Grade Point Average of 2.0 ("C") or better.

A student not eligible for direct admission to the University from high school may become eligible and transfer when he has:

1. established a cumulative Grade Point Average of 2.0 ("C") or better.
2. satisfied subject requirements with a grade of "C" or better.

There is an exception to this requirement. Up to two units of credit in the required high school subjects will be excused if a student has earned a Grade Point Average of 2.4 or better in 84 quarter units (56 semester units) of college.
credit in courses accepted by the University for transfer. Any deficiency over two units in the required high school subjects must be made up by completing appropriate college courses with a grade of "C" or better.

The University of California has stated breadth requirements in terms of courses completed, not units. Because there may be individual variations between the several University campuses, students planning to transfer to a campus of the University of California should obtain a catalog from that campus and, in consultation with his advisor, determine the proper courses needed to fulfill breadth requirements. The Admissions and Records Office maintains a collection of University catalogs for student reference.

ASSOCIATE IN ARTS DEGREE FOR TRANSFER TO PRIVATE COLLEGES AND UNIVERSITIES

Students planning to transfer to private colleges and universities should consult the catalog of the college to which they plan to transfer for specific lower division required courses which may be completed at Columbia Junior College. The student should consult with his advisor for guidance.
A Guiding Principle...

This College shall combine the strengths of the various disciplines, so that each will contribute to and support the bases used by students to reach their goals. No single instructional area or individual will be self-sustaining, but only as a component of the student's educational progress.
DESCRIPTION OF COURSES

Numbering of Courses
Courses numbered 1 to 99 are not intended for transfer, but may be accepted for transfer credit by agreement with specific four-year colleges and universities. Courses numbered 100 and above are designated baccalaureate level courses.

Credit Value
The number in parenthesis after the course title indicates the unit credit value of the course. Courses listed in this catalog are described in quarter units. One and one-half quarter units equal one semester unit.

Course Information
A course description is given for each course offered by the College. Students are urged to refer to the course description for information concerning course prerequisites and allocation of class hours for lecture, laboratory, field trips, or other required learning activities.

Prerequisites
Prerequisites are intended to ensure that the student will have sufficient preparation before entering a course. Where no prerequisite is stated for a course, none is required.
A prerequisite may be waived with the Dean of Instruction's permission when, in the instructor's judgment, the student has adequate preparation to satisfy the course objectives.

Credit/No Credit Courses
Except for courses taken to fulfill Major Requirements, all courses may be petitioned for Credit/No Credit. (Pages 31 and 40)

ANTHROPOLOGY

101abc. Introduction to Anthropology (5) (5) (5)
(a) Lecture 5 hours.
Man and his evolutionary history with emphasis on recent developments; primatology; the fossil sequence beginning with preman through the Paleolithic era to his domestication of plants and animals and the dawn of civilization. Race. Man's cultural adaptations resulting from his biological and genetic background.
(b) Lecture 5 hours.
Primitive man and the concept of culture basic to anthropology. Emphasis on methods of fieldwork, cultural ecology, language, social structure, the psychological perspective, religion, medicine, and cultural change.
(c) Lecture 5 hours.
Prerequisite. Anthropology 101a or 101b.
Current problems of Anthropology. Intra-specific aggression, territoriality, population control, primate social organization, intra- and inter-species communication, and the present and future trends in social organization, war, religion, and culture change.

104. Introduction to Anthropological Linguistics (5)
Lecture 5 hours.
The nature and scope of anthropological linguistics. Animal communication systems. Human language acquisition. Descriptive linguistics, non-verbal communication, paralanguage, transformations, historical linguistics, comparative linguistics, sociolinguistics, and language and culture.

110. Introduction to Archaeology (3)
Prerequisite. Anthropology 101a or 101b.
Lecture 2 hours.
Laboratory 3 hours.
Development of archaeology as an anthropological study; objectives and methods of modern archaeology; a review of archaeological projects in North and South America. Archaeological methods, techniques and site survey methods under field conditions. Basic laboratory and museum techniques. Preparation of an archaeological site report. Field trips may be required.

115. Indians of North America (5)
Lecture 5 hours.
A survey of the origins, cultures, and customs of peoples indigenous to the North American continent with a primary emphasis upon folkways dominant prior to interference by foreign cultures, and a secondary emphasis upon the status of the Indians in the USA today.
APPRENTICE CARPENTRY

The Apprentice Carpentry Program is conducted in accordance with State Apprenticeship Laws. The program is open to men between 17 and 26 years of age with the equivalent of a high school education. Prospective apprentices must make application for union membership no later than the eighth day of employment. The apprentice serves for a four-year period, the first three months of which are probationary. Apprentice training consists of full-time employment supplemented by related classroom instruction. The apprentice will be required to meet 4 hours by arrangement each month in addition to classroom schedules.

Students whose work or attendance is not satisfactory may be dropped from the program by recommendation of the Joint Apprenticeship Committee. The College grants credit for the successful completion of the program.

The Associate in Arts degree may be earned, in addition to the completion of the apprenticeship training program, by fulfilling the Graduation Requirements listed on page 40.

Non-apprentices who wish to enroll in the class for purposes of their own general education may do so with permission of the Associate Dean, Occupational Education.

1abc. Apprentice Carpentry  (3) (3) (3)
   (a) Prerequisite. Apprenticeship standing. Lecture 3 hours.
   (b) Prerequisite. Apprentice Carpentry 1a or Consent of Instructor. Lecture 3 hours.
   (c) Prerequisite. Apprentice Carpentry 1b or Consent of Instructor. Lecture 3 hours.

2abc. Apprentice Carpentry  (3) (3) (3)
   (a) Prerequisite. Apprentice Carpentry 1abc. Lecture 3 hours.
   (b) Prerequisite. Apprentice Carpentry 2a. Lecture 3 hours.
   (c) Prerequisite. Apprentice Carpentry 2b. Lecture 3 hours.
       Simplified framing, framing tables, sheathing, and insulation.

3abc. Apprentice Carpentry  (3) (3) (3)
   (a) Prerequisite. Apprentice Carpentry 2abc. Lecture 3 hours.
   (b) Prerequisite. Apprentice Carpentry 3a. Lecture 3 hours.
   (c) Prerequisite. Apprentice Carpentry 3b. Lecture 3 hours.
       Interior and exterior trim, stair layout, blueprint reading, and advanced framing techniques.

4abc. Apprentice Carpentry  (3) (3) (3)
   (a) Prerequisite. Apprentice Carpentry 3abc. Lecture 3 hours.
   (b) Prerequisite. Apprentice Carpentry 4a. Lecture 3 hours.
   (c) Prerequisite. Apprentice Carpentry 4b. Lecture 3 hours.
       Heavy timber construction, reinforced concrete form work, blueprint reading, and estimating.

ART

All studio art classes may be offered for one or two units.

101. Art Appreciation  (3)
   Lecture 3 hours.
   Introduction to historical and present-day art emphasizing principles and purposes of various forms of art.

102abc. Drawing  (2) (2) (2)
   (a) Basic Lecture 3 hours.
       Laboratory 6 hours.
       Introduction to perspective, composition, rendering techniques and media.

   (b) Figure Lecture 3 hours.
       Laboratory 6 hours.
       Continuation of Art 102a with emphasis on problems of proportion, foreshortening, rendering, and composition.

   (c) Anatomy Lecture 3 hours.
       Laboratory 6 hours.
103abc. Introduction to Art
(a) Basic Laboratory 6 hours.
Theory and practice in visual arts emphasizing visual design, principles and systems of visual organization, and a basic survey of past and present examples of art.
(b) Color and Composition Laboratory 6 hours.
Painting processes, elements, principles, systems of visual organization, survey of painting; emphasis on color theory.
(c) Structure and Composition Laboratory 6 hours.
Three-dimensional organization including sculpture, assemblage, kinetic sculpture, and architectural design; emphasis on contemporary art and design.

106abc. Watercolor
(a) Introductory Laboratory 6 hours.
Introduction to the basic techniques and problems of transparent watercolors.
(b) Advanced Laboratory 6 hours.
Continuation of Art 106a introducing opaque watercolors and various experimental techniques.
(c) Special Problems Laboratory 6 hours.
Continuation of Art 106ab with emphasis on further experimentation and development of personal expression.

108abc. Ceramics
(a) Introductory Laboratory 6 hours.
Introduction to basic ceramic methods including hand building and wheel thrown forms.
(b) Advanced Laboratory 6 hours.
Continuation of Art 108a with emphasis on glaze formulation.
(c) Special Problems Laboratory 6 hours.
Continuation of Art 108a and 108b with emphasis on personal expression and experimentation.

110abc. History of Art
(a) Ancient and Medieval Lecture 3 hours.
Survey of art history from the Paleolithic Age through the Late Gothic Era.
Field trips may be required.
(b) Renaissance and Baroque Lecture 3 hours.
Survey of art history from 15th through the 18th centuries.
Field trips may be required.
(c) 19th and 20th Century Lecture 3 hours.
The background, causes, and evolution of contemporary art.

112abc. Oil Painting
(a) Introductory Laboratory 6 hours.
Basic principles, techniques, and problems of oil painting.
(b) Advanced Laboratory 6 hours.
Continuation of Art 112a emphasizing advanced oil painting techniques and problems.
(c) Special Problems Laboratory 6 hours.
Study and application of 19th and 20th Century painting techniques to contemporary studio practice.

114abcd. Sculpture
(a) Introductory Laboratory 6 hours.
Basic principles, techniques, and problems of sculpture.

(b) Advanced Laboratory 6 hours.
Continuation of Art 114a emphasizing advanced problems and techniques in sculpture.

(c) Special Problems Laboratory 6 hours.
Continuation of Art 114a and 114b with emphasis on experimentation and development of personal expression.

(d) Metal Laboratory 6 hours.
Introduction to various metalworking techniques with an emphasis on aesthetic design.

**AVIATION**

1. **Private Pilot Ground School**
   (3)
   Lecture 3 hours.
   Preparation for Federal Aviation Administration written examination for private pilot certificate. Instruction includes: aircraft operations, air traffic, pilot privileges and limitations, flight planning, map reading, radio communications, weather and safety.

2ab. **Commercial Pilot Ground School**
   (3) (3)
   (a) Prerequisite. Aviation 1.
   Lecture 3 hours.
   Flight information, civil air regulations, radio and navigational aids.
   (b) Prerequisite. Aviation 2a.
   Lecture 3 hours.
   Preparation for Federal Aviation Administration written examination for commercial pilot certificate.

3ab. **Instrument Rating Ground School**
   (3) (3)
   (a) Prerequisite. Aviation 1.
   Lecture 3 hours.
   Preparation for Federal Aviation Administration written examination for instrument rating certificate.
   (b) Prerequisite. Aviation 3a.
   Lecture 3 hours.

**BIOLOGY**

10. **Natural History and Ecology**
   (3)
   Lecture 2 hours.
   Laboratory 3 hours.
   Natural history of California flora and fauna with emphasis on ecological principles and relationships.
   Field trips may be required.

100. **Biology, Man and Contemporary Society**
   (4)
   Lecture 4 hours.
   A study of the biological concepts of ecology and genetics as they relate to modern society.

110. **Fundamentals of Biology**
   (4)
   Lecture 3 hours.
   Laboratory 3 hours.
   Modern concepts, inquiry methods, and historical background of biological unity and processes.

111. **Principles of Biology**
   (5)
   Lecture 3 hours.
   Laboratory 6 hours.
   Modern concepts, inquiry methods, and historical background of biological units and processes. Investigation of such subjects as the cell, growth and development, life functions, biological systems, heredity, behavior and ecology.
115. Heredity and Evolution  
Prerequisite. Biology 110 or Biology 111.  
Lecture 4 hours.  
Introductory genetic principles; inheritance, population variation and evolution in plants and animals. Social implications of genetics and evolution.

120. Fundamentals of Plant Biology
Prerequisite. Biology 110.  
Lecture 2 hours.  
Laboratory 3 hours.  
Structure, functions, and diversity of the plant organism.

121. Principles of Plant Biology
Prerequisite. Biology 110 or 111.  
Lecture 3 hours.  
Laboratory 6 hours.  
Emphasis placed on structure, functions, and diversity of the plant organism.

125. Plant Taxonomy of the Sierra Nevada
Prerequisite. Biology 110 or consent of instructor.  
Lecture 2 hours.  
Laboratory 3 hours.  
A study of the flora of the Sierra Nevada with emphasis on the classification of angiosperms.

130. Fundamentals of Animal Biology
Prerequisite. Biology 110.  
Lecture 2 hours.  
Laboratory 3 hours.  
Structure, functions, and diversity of the animal organism.

131. Principles of Animal Biology
Prerequisite. Biology 110 or 111.  
Lecture 3 hours.  
Laboratory 6 hours.  
Emphasis placed on structure, functions, and diversity of the animal organism.

151. The Terrestrial Environment
Prerequisite. Consent of the Instructor and Biology 110 or Earth Science 110a.  
Lecture 1 hour.  
Laboratory 6 hours.  
Field studies of terrestrial ecosystems with emphasis on techniques for gathering and analysis of physical and biological data.  
Field trips are required.

155. The Aquatic Environment
Prerequisite. Consent of the Instructor and Biology 110 or Earth Science 110a.  
Lecture 1 hour.  
Laboratory 6 hours.  
Field studies of aquatic ecosystems with emphasis on techniques for gathering and analysis of physical and biological data.  
Field trips are required.

BUSINESS

Banking and Finance

110. Principles of Bank Operation
Lecture 4 hours.  
The importance of banking to American economic functions, banking operations, legal relationships between bank and depositors, the Federal Reserve System, banking and public service.

120. Installment Credit
Lecture 4 hours.  
Principles and practice of installment lending, establishing credit, obtaining and checking information, loan servicing and collections, inventory financing, special loan programs, business development and advertising and public relations.

Business Administration

10. Principles of Advertising
Lecture 3 hours.  
Advertising principles and functions; products and services, consumers' media, the advertisement, career opportunities.

20ab. Bookkeeping
(a) Lecture 5 hours.  
Double entry bookkeeping; general and special journals, general and
subsidiary ledgers, business forms, financial statements, and completion of the bookkeeping cycle.

(b) Prerequisite. Business Administration 20a.

Lecture 5 hours.

Bookkeeping entries requiring analysis and interpretation; promissory notes, adjustments for prepaid, unearned, and accrued items, depreciation, voucher system, payroll records, property sales, and income taxes.

51. Business Mathematics (See also Math 51.)

Lecture 4 hours.

Mathematical problems of buying, selling, interest, discounts, insurance, commissions, payrolls, depreciation, and taxes.

55. Report Writing (See also English 55)

Lecture 3 hours.

Study and practice of the skills necessary to write intelligent reports.

101. Principles of Business

Lecture 3 hours.

Business and its functions. Business organization; governmental institutions and controls; economics in business.

102abc. Accounting

(a) Lecture 3 hours.

Accounting principles and procedures, owner's equity, closing books, revenue and expense adjustments, merchandising operations, statement and ledger organization.

(b) Prerequisite. Accounting 102a.

Lecture 3 hours.

Forms of organization, cash and investments, receivables, inventories, fixed assets, liabilities, accounting principles, and manufacturing operations.

(c) Prerequisite. Accounting 102b.

Lecture 3 hours.

Cost data and management needs, analysis of data, supplementary statements, uses of capital, cash-flow statements, department and branch operation, consolidation, profit planning, and income tax considerations.

103ab. Commercial Law

(a) Lecture 3 hours.

Historical development of common law; statutes of California. Federal and State court decisions; legal aspects of business; law of contracts, agency, and employment.

(b) Lecture 3 hours.

Law of sales, negotiable instruments, personal property, real property, partnerships, corporations, insurance, suretyship.

105. Fundamentals of Data Processing

Lecture 4 hours.

History and future of data processing, card processing, computer data processing, and computer programming.

110. Human Relations in Business

Lecture 3 hours.

Influence of industrial development on employer and employee unions, management practices, methods of supervision, employer-employee relationships, mass production and the employee.

Office Occupations

1. Personal Typing

Lecture 2 hours.

Laboratory 3 hours.

Instruction for personal use, including learning keyboard by the touch system, composing at the machine, practical application of typing skills to simple letter writing, manuscripts, and tabulation.

2. Review Typing

Lecture 2 hours.

Laboratory 3 hours.

Development of speed and accuracy; review of simple correspondence, tabulation, manuscripts, and composition at the typewriter.

11. Review Stenography

Prerequisite. Typing rate 30 words per minute.

Lecture 3 hours.

Laboratory 3 hours.

Review of Gregg dictation theory; transcription skills.

20. Business Correspondence

Lecture 3 hours.

The learning and review of effective business practices in the construction of sentences, paragraphs, and letters; the writing of effective business letters such as sales, applications, orders, requests, adjustments, refusals, credit and collection.
101. **Beginning Typing**  
Lecture 3 hours.  
Laboratory 3 hours.  
Drills to develop speed and accuracy; development of typing skills for vocational or personal use; practice on typing straight copy; centering; manuscript typing; tabulation; letter placement.

103. **Intermediate Typing**  
Prerequisite. Office Occupations 101 or typing of 30 words per minute.  
Lecture 3 hours.  
Laboratory 3 hours.  
Development of speed and accuracy; advanced correspondence; tabulation; typing of manuscripts, outlines, and business forms.

104. **Advanced Typing**  
Prerequisite. Office Occupations 103 or typing rate of 45 words per minute.  
Lecture 3 hours.  
Laboratory 3 hours.  
Further development of speed and accuracy; study of business forms, complicated tabulated material, legal forms, typing for reproduction, and special problems in letter placement.

110ab. **Beginning Stenography**  
Prerequisite. Typing rate of 30 words per minute.  
Lecture 3 hours.  
Laboratory 3 hours.  
Complete theory of Gregg shorthand; foundation for dictation and transcription.

112ab. **Intermediate Stenography**  
Prerequisite. Dictation rate at 60 words per minute for 3 minutes and typing rate of 45 words per minute.  
Lecture 3 hours.  
Laboratory 3 hours.  
Sustained dictation speed on new material; accuracy on transcription; spelling, punctuation, and office-style dictation.

113ab. **Advanced Stenography**  
Prerequisite. Dictation rate at 80 words per minute for 3 minutes and typing rate of 45 words per minute.  
Lecture 3 hours.  
Laboratory 3 hours.  
Development of speed and accuracy; correlation of grammar, spelling, punctuation, and typing.

130abc. **Office Practice**  
(a) Prerequisite. Typing skill.  
Lecture 2 hours.  
Laboratory 3 hours.  
Filing rules and systems; use of office equipment and supplies.

(b) Prerequisite. Typing skill.  
Lecture 2 hours.  
Laboratory 3 hours.  
Machine transcription; use of mimeograph, ditto, and copy machines.

(c) Prerequisite. Typing skill.  
Lecture 2 hours.  
Laboratory 3 hours.  
Adding machines; rotary and printing calculators; key punch operation.

131. **Office Occupations**  
Prerequisite. Consent of Instructor.  
Laboratory 3 hours a week for each unit of credit.  
Supervised office work experience.  
May be repeated for a maximum of 12 units of credit.
Real Estate

10. Principles of Real Estate
   Lecture 3 hours.
   Real and personal property acquisition, ownership, estates, joint
   tenancies, partnerships, sales, contracts, deeds, taxes, and financing
   real estate.

11. Real Estate Practice
    Prerequisite. Real Estate 10 or Real Estate License.
    Lecture 4 hours.
    Customer relationship, general real estate operations, the industry,
    types of listings, valuation of listings, selling and current marketing
    techniques, the deposit receipt, advertising, financing, escrow
    procedures, real estate taxes, income tax and real estate, property
    management, leasing, appraisals, insurance, mathematics, business
    opportunities, public sales, exchanges, trade-in programs and in-
    vestments.

12. Legal Aspects of Real Estate
    Prerequisite. Real Estate 10.
    Lecture 4 hours.
    California real estate law; titles, encumbrances, recording, real
    property acquisition and transfer; Penal Code.

13. Real Estate Finance
    Prerequisite. Real Estate 10.
    Lecture 4 hours.
    Residential and commercial financing; lending institutions, money
    markets, and interest rates.

14. Real Estate Appraisal
    Prerequisite. Real Estate 11 and 12.
    Lecture 4 hours.
    Appraisal of residential and commercial properties; methods and
    techniques for determining market value; the appraisal report.

15. Real Estate Economics
    Prerequisite. Real Estate 10.
    Lecture 4 hours.
    Economic factors influencing real estate; real estate market and
    business cycles; commercial, industrial, and residential properties;
    urban development and renewal; regulation of land uses.

Supervisory Training

1. Elements of Supervision
   Lecture 3 hours.
   Supervisor's role in business and industry; organizational policies,
   management directives, personnel problems and practices;
   leadership techniques.

2. Middle Management
   Prerequisite. Supervisory Training 1.
   Lecture 3 hours.
   The basis for management; planning, organizing, staffing and con-
   trolling management functions.

CHEMISTRY

100. Fundamentals of Chemistry
    Prerequisite. Mathematics 32 or one year of high school algebra.
    Lecture 3 hours.
    Laboratory 3 hours.
    Fundamental theories and principles of inorganic chemistry: atomic
    and molecular structure, chemical and physical changes, solutions,
    colloids, gases, nonmetals, metals, and nuclear chemistry.

101abc. General Chemistry
    (4) (5) (5)
    (a) Prerequisite. One year of high school chemistry with a "B" average
        and Math 101 or equivalent; or Chemistry 100 and Math 101; or Con-
        sent of Instructor.
        Lecture 3 hours.
        Laboratory 6 hours.
        Survey of atoms, molecules, ions, chemical bonding, gases and
        organic compounds.

    (b) Prerequisite. Chemistry 101a or equivalent with Consent of Instructor.
        Lecture 3 hours.
        Laboratory 6 hours.
        Survey of liquids, solids, solutions, kinetics, equilibrium and ther-
        modynamics.

    (c) Prerequisite. Chemistry 101b or equivalent.
        Lecture 3 hours.
        Laboratory 6 hours.
        Survey of acids, bases, complex ions, oxidation-reduction and
        nuclear chemistry.
121ab. College Chemistry (5) (5)
(a) Prerequisite. High school chemistry with a "B" average and high school algebra; or Chemistry 100; or consent of instructor.
Lecture 3 hours.
Laboratory 6 hours.
Survey of the structure of atoms and molecules, stoichiometry, electrolytes, the states of matter, chemical equilibria, and nuclear chemistry.

(b) Prerequisite. Chemistry 121a.
Lecture 3 hours.
Laboratory 6 hours.
Survey of thermochemistry, electrochemistry, metals, nonmetals, hydrocarbons and their derivatives.

CONSTRUCTION

1. Introduction to Carpentry (4)
Lecture 3 hours.
Laboratory 3 hours.
Theory and practice of framing non-commercial buildings for private use. Construction of small non-structural projects.

CRIME PREVENTION

Criminal Justice
Courses in Correctional Science and Law Enforcement are offered through the Regional Criminal Justice Training Center, Modesto, in cooperation with Columbia Junior College.
The Regional Criminal Justice Training Center, located on the West Campus of Modesto Junior College, serves in-service criminal justice education training and resource needs of eight counties including Alpine, Amador, Calaveras, Tuolumne, San Joaquin, Stanislaus, Merced and Mariposa.
The Training Center provides its services through an on-site program as well as four outreach training sites located at the Amador County District Attorney's Office, Calaveras Sheriff's Department, Mariposa County Sheriff's Department and Tuolumne County District Attorney's Office. Programs and services also are offered through the cooperative efforts of the community colleges located in these counties.

Students enrolled in Corrections or Law Enforcement courses will be enrolled by the Training Center and will receive credit through Modesto Junior College. General education requirements for the Associate of Arts Degree in Corrections or Law Enforcement may be completed at Columbia Junior College in its regular course of study.
Bulletins and announcements of forthcoming courses and programs will be circulated by both the Training Center and Columbia Junior College through the office of the Associate Dean of Instruction, Occupational Education.

Administration of Justice

1. Introduction to Administration of Justice (3)
Lecture 3 hours.
History and survey of current law enforcement fields. Emphasis on employment potential.

Law Enforcement

8. Aquatic Law Enforcement (4)
Lecture 3 hours.
Laboratory 3 hours.
Law enforcement regulations and procedures; water safety; boat operation.

DRAFTING

1. Blueprint Reading (2)
Lecture 2 hours.
Residential and commercial print reading, printing processes applied to drafting and trade competency testing.

2. Beginning Drafting (3)
Lecture 2 hours.
Laboratory 3 hours.
For those with no drafting knowledge. History, language, lettering, freehand sketching, instruments, and construction.

102abc. Basic Drafting (3) (3) (3)
(a) Prerequisite. Drafting 2.
Lecture 2 hours.
Laboratory 3 hours.
The use of tools and materials, knowledge of lettering, geometry, freehand sketching, orthographic projection, sectioning and basic dimensioning.

(b) Prerequisite. Drafting 102a.
Lecture 2 hours.
Laboratory 3 hours.
Orthographic projection, auxiliary views, dimensioning, tolerancing, threads, fasteners, and springs.

(c) Prerequisite. Drafting 102b.
Lecture 2 hours.
Laboratory 3 hours.
Complete drawings (tracings and prints), applied design, shop process and fabrication.

103abc. Advanced Drafting

(a) Prerequisite. Drafting 102c.
Lecture 2 hours.
Laboratory 3 hours.
Review of basic drafting, lettering devices, and special templates. Intersections and developments in sheet metal, welding representations, and design of cars and gears.

(b) Prerequisite. Drafting 103a.
Lecture 2 hours.
Laboratory 3 hours.
Map drafting, electrical and electronic, aerospace, and technical illustration.

(c) Prerequisite. Drafting 103b.
Laboratory 6 hours.
Independent study in a concentrated area of drafting. Student's choice must involve current industrial practices.

104abc. Architectural Drafting

(a) Prerequisite. Drafting 102a.
Lecture 3 hours.
Area planning, basic plans, locations, sections, foundations, framing, schedules and specifications.

(b) Prerequisite. Drafting 104a.
Lecture 3 hours.
Technical architectural plans, creative architectural drafting and design.

(c) Prerequisite. Drafting 104b.
Lecture 3 hours.
Codes, related plans, modulars, design, theory, checking, and costs.

130. Drama Appreciation
Lecture 3 hours.
A survey of selected dramatic literature, theatre methods, and relevant historical backgrounds.

133abc. Theatre Background — Dramatic Literature
Lecture 4 hours.
A study in depth of the history and development of the theatre, its significant figures and selected plays.

135. Theatre Expression
Lecture 1 hour.
Laboratory 3 hours.
Developmental experiences in movement and speech as they contribute to the actor's resources for theatre expression.

143abc. Acting

(a) Fundamentals
Lecture 5 hours.
Investigation of techniques and theories prerequisite to theatrical performances; psychological, philosophical, and practical preparation for the actor's art.

(b) Scene Study
Prerequisite. 143a and/or Consent of Instructor.
Lecture 4 hours.
Laboratory 3 hours.
Character analysis and actor's interpretation in the preparation of dramatic scenes for performance.

(c) Advanced Projects
Prerequisite. Drama 143a and 143b and/or Consent of Instructor.
Lecture 3 hours.
Laboratory 6 hours.
Advanced workshop activity for production of one-act plays, segments of longer plays or full length plays whose technical requirements are minimal; intensive workshop concentration designed for public performance in the areas of improvisation or mime. May be repeated one time for credit.

155. Survey of Technical Theatre
Lecture 3 hours.
Laboratory 6 hours.
An overview of the basic techniques, materials, and concepts of design and construction related to physical theatre production. Survey of costume to make-up, stagecraft and properties, stage
Performing Arts Workshop.

Lecture 1 hour.
Laboratory 12 hours.
Directed activities in acting and technical theatre with participation in public performances and related production activities.

Simplified Production Techniques

Laboratory 9 to 15 hours.
Basic principles of production for recreational and school dramatic activities; scene design, stagecraft, properties, costuming, lighting, sound. Emphasis on using minimal equipment and budget.

Summer Drama Workshop

Workshop Rehearsal and Production

Lecture 1 hour.
Laboratory 9 hours.
Directed rehearsal and public performance at the Summer Drama Workshop with related production activities.

Workshop Acting Survey

Lecture 1 hour.
Laboratory 9 hours.
Intensive workshop experience in acting, conducted by selected professional and academic guest lecturers and theatre artists, in mime, body movement, improvisation, stage speech, scene study, and dance.

Workshop Survey of Technical Theatre

Lecture 2 hours.
Laboratory 6 hours.
Intensive workshop experiences in stagecraft and properties, lighting and sound, and stage costume, conducted by selected professional and academic guest lecturers and theatre artists.

Performing Arts Company Laboratory

Laboratory 3 hours.
Practical experience in various phases of activity associated with the management and operation of the Performing Arts Workshop; box office operation, house management, promotion and publicity, and selected aspects of production and performance preparation.
EARTH SCIENCE

100ab. Survey of Earth Science (3) (3)
(a) Lecture 2 hours.
Laboratory 3 hours.
Survey of astronomy and geology; basic principles and their effect on modern society.
(b) Lecture 2 hours.
Laboratory 3 hours.
Survey of oceanography and meteorology; principles and their effect on modern society.

110ab. Geology (4) (4)
(a) Physical
Lecture 3 hours.
Laboratory 3 hours.
Materials and structure of the earth, agents of erosion, forces of change, volcanoes, and earthquakes. 
Field trips may be required.
(b) Historical
Prerequisite. Earth Science 110a.
Lecture 3 hours.
Laboratory 3 hours.
Origin and history of the earth with a description of the life of successive geologic periods, time and geologic time scale. Special reference to North America and the Sierra Nevada. 
Field trips may be required.

120. General Astronomy (3)
Prerequisite. High school general science, physics, or chemistry.
Lecture 3 hours.
History of astronomy, modern astronomy, tools of astronomy, the solar system and its relationship to the galaxies; properties and evolution of stars. 
Field trips may be required.

121. Astronomical Viewing (1)
Laboratory 3 hours.
Viewing the night sky with the telescope. 
Field trips may be required.

Space Science
Lecture 3 hours.
History and development of space technology. Basic understanding of the problems of man in space.

ECONOMICS

15. Understanding the American Economy (3) (3)
Lecture 3 hours.
A basic introduction to macro-economic principles with an emphasis on U.S. economic policies and institutions. Topics covered are gross national product, recession, inflation, fiscal policy, money and the Federal Reserve System, monetary policy, wage and price controls, balance of payments policies.

101abc. Principles of Economics (3) (3) (3)
(a) Lecture 3 hours.
(b) Lecture 3 hours.
Topics in economics. An examination of topics of current interest in economic policy and thought such as international economics and imperialism; pollution and environmental economics; developing countries; land use; poverty problems.
(c) Lecture 3 hours.
Micro-economic analysis. The firm; analysis of costs; theory of production; pricing factor inputs including wages, rent, and interest.

ENGLISH

51ab. College Composition (3) (3)
(a) Lecture 3 hours.
Training in basic composition skills, reading, interpretation, and discussion of college-level materials. Basic mechanics, sentence structure, paragraph development, essay and report organization.
(b) Prerequisite. English 51a.
Lecture 3 hours.
Development of college composition skills; reading, interpretation, and discussion of college-level materials, including units of logic. Organization and development of technical reports and the term paper.
55. **Report Writing (See also Business 55)**

Lecture 3 hours.

Study and practice of the skills necessary to write intelligent reports. Recommended for those students who are preparing to enter an occupational area, where report writing is required, but may be taken by students in non-occupational programs who wish to learn about report writing.

101abc. **Reading and Composition**

(a) **Prerequisite.** Qualifying score on the English diagnostic examination. Lecture 3 hours.

Development of skills in writing and reading expository prose.

(b) **Prerequisite.** English 101a. Lecture 3 hours.

Continuation of the writing and reading skills presented in English 101a with concentration on the research paper and an introduction to literary analysis.

(c) **Prerequisite.** English 101b. Lecture 3 hours.

Concentration on the continued development of the skills necessary in literary analysis and critical writing. Reading material chosen from prose fiction, verse, and drama.

110. **Creative Writing**

Prerequisite. English 101a or 51a and 51b, and/or Consent of Instructor. Lecture 5 hours.

Instruction and practice in writing poetry, fiction, and drama. Analysis of contemporary works with respect to literary techniques.

*Field trips may be required.*

117ab. **Literature of the United States**

(a) **Prerequisite.** English 51ab or English 101ab. Lecture 5 hours.

A study of the literature of the United States from the beginning of English colonization to the Civil War and Reconstruction. Reading, analysis, and discussion of the works of the major American writers.

(b) **Prerequisite.** English 51ab or English 101ab. Lecture 5 hours.

A study of the literature of the United States from the Civil War to the present. Reading, analysis, and discussion of the works of the major American writers in all genres, with special emphasis on the formation of American ideas and ideals.

146ab. **Survey of English Literature**

(a) **Prerequisite.** English 51ab or English 101ab. Lecture 5 hours.

English literature from the Anglo-Saxons to the 19th Century.

(b) **Prerequisite.** English 51ab or English 101ab. Lecture 5 hours.

English literature from the 19th Century to contemporary literary works.

149. **California Literature**

Prerequisite. English 51ab or English 101ab. Lecture 5 hours.

A chronological survey of California literature in the 19th and 20th Centuries with emphasis on selected works of major American authors living and writing in California.

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**FIRE SCIENCE**

1. **Introduction to Fire Suppression**

Lecture 3 hours.

Fire suppression organization; equipment; characteristics and behavior of fire; fire hazards; properties of combustible materials; building design and construction; extinguishing agents; basic fire fighting tactics; public education.

2ab. **Fundamentals of Fire Prevention**

(a) Lecture 3 hours.

(b) **Prerequisite.** Fire Science 2a or Consent of Instructor. Lecture 3 hours.

Fire prevention organizations; inspections; surveying and mapping; recognition of fire hazards; engineering a solution of the hazard; enforcement of solution; fire prevention and the public.

3ab. **Fire Fighting Strategy and Tactics**

(a) **Prerequisite.** Fire Science 1. Lecture 3 hours.

(b) **Prerequisite.** Fire Science 3a or Consent of Instructor. Lecture 3 hours.

Fire chemistry; equipment and manpower; fire fighting tactics and strategy; methods of attack; pre-planning fire problems.

4ab. **Hazardous Materials**

(a) **Prerequisite.** Fire Science 1. Lecture 3 hours.
(b) Prerequisite. Fire Science 4a or Consent of Instructor. Lecture 3 hours.
Flammable liquids, water reactive chemicals, oxidizers, acids, flammable solids, and flammable gases. Flammable metals, plastics, explosives, fuels, radiation hazards, and insecticides.

5. Fire Apparatus and Equipment (3)
Prerequisite. Fire Science 1.
Lecture 2 hours.
Laboratory 3 hours.
Driving laws and techniques. Construction and operation of pumping engines, tank trucks, and trailers.

6. Wildland Fire Control (3)
Lecture 3 hours.
Factors affecting wildland fire prevention, fire behavior, and control techniques.

7. Heavy Equipment in Fire Control (3)
Lecture 3 hours.
Theory of heavy equipment use by a coordinated fire control team in fighting range fires.

8. Fire Protection Equipment and Systems (3)
Prerequisite. Fire Science 1.
Lecture 3 hours.
Portable fire extinguishing equipment, sprinkler systems, protection systems for special hazards, fire alarm and detection systems.

9. Related Codes and Ordinances (3)
Prerequisite. Fire Science 1.
Lecture 3 hours.
National, state, and local laws and ordinances which influence the field of fire prevention.

10. Fire Company Organization and Procedures (3)
Lecture 3 hours.
Duties and responsibilities of personnel, personnel administration, communications, functions of equipment, maintenance, training, and records.

11. Fire Hydraulics (3)
Lecture 3 hours.
Review of basic mathematics, hydraulic laws and formulas as applied to the fire service; application of formulas and mental calculation to hydraulic problems; water supply problems; underwriters' requirements for pumps.

FOREIGN LANGUAGE

Spanish

100abc. Conversational (3) (3) (3)
(a) Beginning
Lecture 2 hours.
Laboratory 3 hours.
(b) Intermediate
Prerequisite. 100a and/or Consent of Instructor.
Lecture 2 hours.
Laboratory 3 hours.
(c) Advanced
Prerequisite. 100b and/or Consent of Instructor.
Lecture 2 hours.
Laboratory 3 hours.
Practice in vocabulary, idioms, and grammatical usage with emphasis in conversational use of the language as spoken in Mexico.

FORESTRY

100. Introduction to Forestry (4)
Lecture 3 hours.
Laboratory 3 hours.
History of the forest industry, survey of forest resources, forestry management and utilization techniques, career opportunities, legislation, and forest practices.
Field trips may be required.

101. Forest Surveying (5)
Prerequisite. Math 102 recommended.
Lecture 3 hours.
Laboratory 6 hours.
Utilization of basic forest surveying instruments and equipment. Techniques of collecting, recording, plotting, and drafting field data. Field trips may be required.

102. Dendrology (4)
Prerequisite. Biology 120 or 121 recommended.
Lecture 3 hours.
Laboratory 3 hours.
Characteristics, identification, and range of native trees and shrubs of the western United States; emphasis on plants of economic importance to forest practices in California. Field trips may be required.
FORESTRY TECHNOLOGY

10. Introduction to Technical Forestry (4)
Lecture 3 hours.
Laboratory 3 hours.
Nature and scope of the forest technician's work; knowledge and skills for employment; employment opportunities. Survey of forest resources, history of forestry, forest utilization, and applied forest management. Role of forest technician in public and private forestry.
Field trips may be required.

11. Forest Surveying Techniques (3)
Lecture 2 hours.
Laboratory 3 hours.
Basic forest surveying instruments. Application of hand and staff compass, topographic and engineer's chain, abney and dumpy level, pocket altimeter, and engineer's transit.
Field trips may be required.

12. Tree and Plant Identification (3)
Lecture 2 hours.
Laboratory 3 hours.
Classification and identification of major western United States timber species with emphasis on local and California plant cover. Description of physical, economic, and silvicultural characteristics of these trees as related to forest management and utilization. Techniques of preparing plant specimens.
Field trips may be required.

13. Forest Inventory (5)
Prerequisite. Forestry Technology 11.
Lecture 3 hours.
Laboratory 6 hours.
Forest inventory techniques: applied timber cruising, scaling, and marketing. Field tabulation and computation techniques. Training experience in forest inventory.
Field trips may be required.

20. Applied Forest Management (5)
Prerequisite. Forestry Technology 11 and 13.
Forestry Technology 12 and Natural Resources Technology 15 recommended.

Lecture 2 hours.
Laboratory 9 hours.
Locate and inventory a given forest property in the field. Develop property boundaries; inventory timber and other natural resources. Design topographic and timber type map and road system for property.

GUIDANCE

101. Career Exploration (2)
Lecture 2 hours.
Personal assessment using and analyzing value, interest, and aptitude measurement instruments and group discussion; exposure to industry and government vocations and resources useful in career planning.

HEALTH EDUCATION

101. Health Education (2)
Lecture 2 hours.
Personal and community health; physical, mental, and social well being of man in a changing environment.

110. Safety and First Aid Education (2)
Lecture 2 hours.
Causes and prevention of accidents. Covers Red Cross Standard and Advanced First Aid with certificate available upon satisfactory completion of course.

HEALTH OCCUPATIONS

1abcd. Vocational Nursing (18) (18) (18) (18)
The Vocational Nursing program is accredited by the California Board of Vocational Nurse and Psychiatric Technician Examiners. Students who successfully complete the program are eligible to take a state examination leading to licensure as a vocational nurse.

(a) Lecture 10 hours.
Laboratory 25 hours.
(b) Lecture 10 hours.
Laboratory 25 hours.
(c) Lecture 10 hours.
Laboratory 25 hours.
(d) Lecture 10 hours.
Laboratory 25 hours.
Orientation to vocational nursing; health of individual, family and community; anatomy and physiology; nutrition in health and disease; cause and prevention of disease; reaction to disease; care of patients with specific medical-surgical conditions; rehabilitation; ethics and legal responsibilities; pregnancy; caring for mothers and infants; growth and development; the family unit; work organization.

Field trips may be required.

2ab. Home Health Aide
(a) Lecture 3 hours.
Laboratory 3 hours.
An orientation to local health facility procedures. Basic patient care. Introduction to personal hygiene, body systems, illness and nutrition.
(b) Prerequisite. Health Occupations 2a.
Lecture 3 hours.
Laboratory 3 hours.
Post hospital patient care using prescribed exercises, assisting with self administered medications, and performing household services essential to patients' care in the home.
Field trips may be required.

5. Pharmacology for Nurses
Lecture 2 hours.
A review of the common drugs affecting the major body systems.

HEAVY EQUIPMENT

Note: Purchase of student insurance is a prerequisite to all heavy equipment laboratory classes.

1ab. Introduction to Heavy Equipment
(a) Lecture 2 hours.
Use of heavy equipment in the construction of industry; safety training and accident prevention; plan reading and grade setting.
(b) Apprenticeship
Prerequisite. Concurrent enrollment in Heavy Equipment 1a.
Lecture 1 hour.
Historical and legal background, administration of apprenticeship systems, the operating engineer apprenticeship, Federal and State laws that provide worker security.

2. Internal Combustion Engines — Diesel
Lecture 2 hours.
Laboratory 6 hours.
Principles, construction, and operation of diesel engines. Practical experience in the dismantling, assembly, operation and maintenance of diesel engines.

3. Automatic Control Systems
Lecture 2 hours.
Laboratory 6 hours.
The repair and maintenance of heavy equipment control systems operated by physical controls.

4. Special Systems
Lecture 2 hours.
Laboratory 6 hours.
Instruction in hydraulics, rigging, pneumatics, and basic electrical systems.

5. Gas Welding
Lecture 1 hour.
Laboratory 3 hours.
Basic gas welding for shop and field repair of heavy equipment components.

6. Arc Welding
Lecture 1 hour.
Laboratory 3 hours.
Basic arc welding for shop and field repair of heavy equipment components.

7ab. Electrical Control Systems
(a) Lecture 2 hours.
Laboratory 6 hours.
(b) Prerequisite. Previous or concurrent enrollment in Heavy Equipment 7a or Consent of the Instructor.
Lecture 2 hours.
Laboratory 6 hours.
Advanced study of electricity, magnetism, batteries, generators, motors and circuits.

8ab. Heavy Duty Equipment Repair
(a) Lecture 3 hours.
Repair of bearings, clutches, fluid drives, transmissions and brakes.
(b) Lecture 3 hours.
Repair of tracks, wheels, steering, pumps, and compressors.

9. Construction Rigging
Lecture 1 hour.
Laboratory 3 hours.
Use of ropes, chains, hooks and slings. Handling loads on cranes, hoists, derricks. Safe operation of jacks, rollers, and skids.

10ab. **Advanced Maintenance Laboratory**

*Laboratory 6 hours.*

(Independent Study and Guided Practice.)

Special repair projects are assigned to advanced students with emphasis on speed, accuracy, and work habits.

11. **Directed Field Study**

*Lecture 1 hour.*

*Laboratory 6 hours.*

Specialized areas of field work and/or individual study projects not available as regular course offerings.

See provisions on credit limitation (Page 31).

12. **Heavy Equipment Attachments**

*Lecture 1 hour.*

*Laboratory 3 hours.*

Major attachments for dozers, tractors, and cranes.

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**HISTORY**

104abc. **History of Civilization**

*(a) Lecture 4 hours.*

Rise and decline of civilizations to 500 A.D. Prehistoric cultures, the ancient near east, the ancient far east, Greek history and civilization, Roman history and civilization.

*(b) Lecture 4 hours.*

Development of major civilizations from 500 to 1700 A.D. Rise of medieval Europe, the Byzantine Empire, the Moslem world and Africa; contemporary India, China and Japan; the Renaissance and Reform periods; the expansion of Europe into the non-Western world to the age of Louis XIV.

*(c) Lecture 4 hours.*

Development of European, American, and non-Western civilizations from 1700 A.D. to the present. Emergence of national states, their struggle for world power, and their impact on the non-Western world.

111. **Introduction to Asian History**

*Lecture 4 hours.*

Survey of the political and cultural history of India, China, Japan, and Southeast Asia; the response of Asian nations to the impact of the West, and resulting contemporary problems.

113. **Introduction to the History of China**

*Lecture 4 hours.*

Survey of the development of China from its earliest civilization to its major place in the contemporary world.

117ab. **History of the United States**

*(a) Lecture 5 hours.*

Historical development of the United States from colonization to the Civil War and Reconstruction; an analysis and interpretation of political, economic, and social institutions and ideas.

*(b) Lecture 5 hours.*

Historical development of the United States through an analysis and interpretation of political, economic, and social institutions and ideas. The Reconstruction period; expansion of the West; growth of industrialization; rise to world power; contemporary American problems.

121ab. **History of California**

*(a) Lecture 3 hours.*

Formative years of California history from the Spanish discovery to 1870. Institutions and personalities of the Spanish-Mexican period;
United States conquest; and the gold rush period.
Field trips may be required.

(b) Lecture 3 hours.
Economic, social, intellectual, and political development of California since 1843. Influences of gold, isolation, transportation, water, petroleum, farming, population growth, and progressivism.

133. Introduction to Oral History
Prerequisite. Any history course.
Lecture 1 hour.
Laboratory 3 hours.
Fundamentals of the tape-recorded interview. Demonstrations and discussions of the interview as a method in historical research and writing. May be repeated once for credit.

149. The Mother Lode
Lecture 3 hours.
History and lore of the Mother Lode country, with particular emphasis on Tuolumne County.
Field trips may be required.

HUMANITIES

110. Current Religious Movements
Lecture 3 hours.
Survey of the Christian churches, Judaism, mystery religions, Scientology, Satanism, and the ecumenical movement. May be repeated once for credit.

JOURNALISM

101abc. Introduction to Journalism
Prerequisite: Eligibility for English 101a or consent of Instructor.
Lecture 2 hours.
(b) Prerequisite: Journalism 101a.
Lecture 2 hours.
(c) Prerequisite: Journalism 101b.
Lecture 2 hours.
Introduction to basic newsgathering, writing techniques, production methods, photography, commercial art, advertising, libel, slander laws, journalism careers.
Field trips may be required.

107. Newspaper Production
Prerequisite: Journalism 101a, previous or concurrent enrollment in b or c.
Laboratory 3 to 9 hours.
Laboratory using campus newspaper publications and other programs for application of newsgathering, writing skills, and production methods.
Field trips may be required.

MATHMATICS

30. Basic Mathematics
Lecture 1 hour.
Laboratory 3 hours.
A basic course in arithmetic.

30.1 Applied Mathematics — Natural Resources Technology
Prerequisite. Previous or concurrent enrollment in Math 30.
Laboratory 3 hours.
Application of fundamental mathematics to Natural Resources Technology.

30.2 Applied Mathematics — Nursing
Prerequisite. Previous or concurrent enrollment in Math 30 or its equivalent.
Laboratory 3 hours.
Application of fundamental mathematics to nursing education.

30.3 Applied Mathematics — Construction
Prerequisite. Previous or concurrent enrollment in Math 30 or its equivalent.
Laboratory 3 hours.
Application of fundamental mathematics to the construction trades.

32. Algebra
Lecture 5 hours.
Algebraic structure of real numbers, development of algebraic techniques, rational operations, radicals, polynomials, factoring, linear equations, inequalities, and quadratic equations.

33. Geometry
Prerequisite. Math 32 or one year high school algebra recommended.
Lecture 5 hours.
Plane geometry, solid geometry, and coordinate geometry.
41. **Slide Rule**

*Prerequisite.* Math 32 or equivalent.
*Lecture 1 hour.*
Calculation involving multiplication, division, exponential numbers and logarithms with the aid of a slide rule.

51. **Business Mathematics (See also Business 51.)**

*Lecture 4 hours.*
Mathematical problems of buying, selling, interest, discounts, insurance, commissions, payrolls, depreciation, and taxes.

101. **Intermediate Algebra**

*Prerequisite.* Math 32 or one year high school algebra.
*Lecture 5 hours.*
Extension of elementary algebra; includes complex numbers and logarithms.

102. **Trigonometry**

*Prerequisite.* Math 33 and Math 101 or second year high school algebra and one year geometry.
*Lecture 5 hours.*
An analytical approach to trigonometric functions.

103. **College Algebra**

*Prerequisite.* Previous or concurrent enrollment in Math 102 or high school trigonometry.
*Lecture 5 hours.*
Extension of algebraic concepts; includes quadratic equations, inequalities, complex numbers, mathematical induction, binomial theorem, determinants, permutations, and combinations.

105. **Elements of Statistics**

*Prerequisite.* Math 101 or second year high school algebra.
*Lecture 2 hours.*
Statistical concepts of probability, analysis and significance of measurements, measures of central tendency, correlation, variation, distribution, and reliability and validity of tests.

105.1 **General Statistics**

*Prerequisite.* Previous or concurrent enrollment in Math 105.
*Laboratory 3 hours.*
Emphasis on statistical applications.

105.2 **Biological Statistics**

*Prerequisite.* Previous or concurrent enrollment in Math 105.
*Laboratory 3 hours.*
Emphasis on statistical applications in biological science.

105.3 **Psychology — Educational Statistics**

*Prerequisite.* Previous or concurrent enrollment in Math 105.
*Laboratory 3 hours.*
Emphasis on statistical applications in education and psychology.

105.4 **Economics — Business Statistics**

*Prerequisite.* Previous or concurrent enrollment in Math 105.
*Laboratory 3 hours.*
Emphasis on statistical applications in economics and business.

120abcdef. **Calculus with Analytic Geometry**

(a) *Prerequisite.* Two years of high school algebra, one year of plane geometry, and one-half year of trigonometry or Math 102. Math 103 recommended.
*Lecture 5 hours.*
Inequalities, relations, functions, graphs, limits, the derivative, continuity, lines, circles, and conics with geometric and physical interpretations of the derivative.

(b) *Prerequisite.* Math 120a.
*Lecture 5 hours.*
Elements of analytic geometry, introduction to integral calculus with applications, and continuation of differential calculus; trigonometric, logarithmic, exponential, and hyperbolic functions.

(c) *Prerequisite.* Math 120b.
*Lecture 5 hours.*
Polar coordinates, vectors in the plane, techniques in integration, and applications of the integral.

(d) *Prerequisite.* Math 120c or one year of calculus.
*Lecture 5 hours.*
Solid analytic geometry, quadric surfaces, vectors in three dimensions, inner product, cross product, derivatives of vector functions, infinite series, power series, Taylor's theorem, differentiation and integration of series, partial derivatives, implicit differentiation, directional derivatives, gradient maxima and minima, line integrals, double and triple integral, moments of inertia and center of mass, surface area and volume.

(e) *Prerequisite.* Math 120d.
*Lecture 5 hours.*
Systems of linear equations, matrices, determinants, Cramer's rule, rank, vector spaces, linear dependence, linear transformations, orthogonality, differentiation under the integral sign, convergence of improper integrals, functions defined by integrals, vector functions, vector and scalar fields, divergence, curl, line integrals, some special types of first order differential equations, equations with variables separable, exact differential equations, integrating factors, the general first order linear differential equation.
MUSIC

100. Music Fundamentals
Lecture 3 hours.
Introduction to traditional musical notation, key signatures, scales, intervals and chords, sight singing and aural perception.

102. Introduction to Music
Lecture 4 hours.
An introduction to the art of listening and the elements of musical sound in western civilization.
Field trips may be required.

110abc. Survey of Music History and Literature
(a) Lecture 4 hours.
Ancient through classical periods.
(b) Lecture 4 hours.
Romantic period.
(c) Lecture 4 hours.
Impressionistic and contemporary periods.
Field trips may be required.

112. Survey of Jazz and Popular Music
Lecture 4 hours.
Nature, processes and history of jazz and popular music from its origins to the present.
Field trips may be required.

120abc. Music Theory I
(a) Lecture 3 hours.
Laboratory 3 hours.
Concepts of Music Theory.
(b) Prerequisite Music 120a.
Lecture 3 hours.
Laboratory 3 hours.
Beginning diatonic harmonic and melodic functions.
(c) Prerequisite. Music 120b.
Lecture 3 hours.
Laboratory 3 hours.
Expanded diatonic harmonic and melodic functions.

122abc. Music Theory II
(a) Prerequisite. Music 120abc.
Lecture 3 hours.
Laboratory 3 hours.
Beginning chromatic harmonic and melodic functions.
(b) Prerequisite. Music 122a.
Lecture 3 hours.
Laboratory 3 hours.
Expanded chromatic harmonic and melodic functions.
(c) Prerequisite. Music 122b.
Lecture 3 hours.
Laboratory 3 hours.
Atonality and synthetic systems.

126. Composition and Arranging
Prerequisite. Music 100.
Lecture 2 hours.
Composing and arranging in various musical styles. Study and analysis of different methods of composition and arranging. May be repeated one time for credit.

130. Beginning Guitar
Prerequisite. Music 100.
Lecture 2 hours.
Beginning group instruction in methods and techniques of playing the guitar.

160. Sierra Singers
Laboratory 3 hours.
Study and performance of mixed choral works of various periods and styles. May be repeated for credit.

164. Mountainaires
Prerequisite. Concurrent enrollment in Music 160 and consent of instructor; Speech 106 recommended.
Laboratory 3 hours.
Performance of specialized choral styles from madrigal to modern in an ensemble of limited size. Choral experience, a pleasing voice, and some music reading ability required. May be repeated for credit.

166. Community Chorus
Prerequisite. Consent of Instructor.
Laboratory 3 hours.
Study and performance of mixed choral works of various periods and styles. May be repeated one time for credit.
174. Stage Band
Prerequisite. Consent of Instructor.
Laboratory 3 hours.
Reading, preparation and performance of music arranged for stage band in an ensemble of limited size. May be repeated for credit.

176. Orchestra
Prerequisite. Consent of Instructor.
Laboratory 3 hours.
Study and performance of orchestral literature of various styles and media. May be repeated for credit.

180. Ensemble
Prerequisite. Consent of Instructor.
Laboratory 3 hours.
Preparation and performance of various musical styles and media. May be repeated for credit.

100. Conservation of Natural Resources (4)
Lecture 4 hours.
Natural resources conservation. History of land use, field practices, and current problems of physical and biological natural resources conservation.
Field trips may be required.

101. Introduction to Soil, Water, and Atmospheric Resources (4)
Prerequisite. Biology 110 recommended.
Lecture 4 hours.
Characteristics, properties, formation, development, and utilization of soils, water, and atmosphere. Problems of wildlands and agricultural management.
Field trips may be required.

102. Properties of Soils (4)
Prerequisite. Previous or concurrent enrollment in Chemistry 100.
Lecture 3 hours.
Laboratory 3 hours.
Physical, chemical, and biological properties of soils related to wildland and cultivated soils.
Field trips may be required.

11. Applied Wildlife and Fisheries Management (3)
Lecture 2 hours.
Laboratory 3 hours.
Methods and problems of manipulating and appraising wildlife and fisheries habitats. Field identification and life history of local mammals, game birds, and freshwater fishes.
Field trips may be required.

12. Applied Wildlands Management (3)
Lecture 2 hours.
Laboratory 3 hours.
Techniques of managing wildlands for maximum forage, water, and soil quality. Field observations and applications for restoration and protection of range and watershed values. Field identification of important forage and browse species.
Field trips may be required.
13. Interpretive Guided Tours
   Lecture 1 hour.
   Laboratory 3 hours.
   Techniques of conducting interpretive guided tours; methods of meeting and serving diverse public groups in their social, cultural, and recreational use of multiple use recreation lands. Laboratories required six weekends during quarter.
   Field trips may be required.

15. Aerial Photography and Map Interpretation
   Lecture 2 hours.
   Laboratory 3 hours.
   Utilization of basic photogrammetric instruments and equipment. Techniques of delineating soil-vegetation types and distinguishing physical features on aerial photographs. Techniques of map interpretation.
   Field trips may be required.

21. Water for Consumption
   Lecture 4 hours.
   Study of present and future sources of community water supply with special attention to state standards for potable water. Analysis, processing, treatment, quality control, storage and distribution of community water.
   Field trips may be required.

PHILOSOPHY

101abc. Introduction to Philosophy
   (a) Lecture 4 hours.
   Survey of the problems of philosophy with emphasis on epistemology, metaphysics and existentialism.
   (b) Lecture 4 hours.
   Problems in ethics and philosophy of religion (western and oriental).
   (c) Prerequisite. Philosophy 101a.
   Lecture 4 hours.
   Problems of individual and social values in political philosophy and aesthetics.

105. Perspectives in Philosophy
   Prerequisite. Philosophy 101a.
   Lecture 4 hours.
   Major viewpoints or schools of philosophy studied in historical sequence: classical realism, naturalism, idealism, positivism, linguistic analysis, and existentialism.

110. Introduction to Logic
   Lecture 4 hours.
   Basic principles of classical and modern logic: deductive reasoning, including syllogisms, fallacies, and elementary symbolic logic; inductive reasoning and the scientific method.

PHYSICAL EDUCATION

Physical Education courses are available for men, women, or coed sections. Check current class schedules for proper sections. Intermediate and advanced sections will be designated with the prerequisite "Consent of Instructor" on current class schedules. Materials fees, insurance, and field trips are required for some courses. These will also be designated on the current class schedules. Any course may be taken three times for transferable credit. Exceptions: Basic Mountaineering, Alpine Skiing, and Water Skiing, may not be repeated.

PROFESSIONAL COURSES

Required for Physical Education and Recreation majors and minors.

101. Introduction to Physical Education
   Lecture 2 hours.
   Background and principles of Physical Education and sports. Study of the aims and objectives of modern physical education with a view toward development of basic philosophy and background for professional education. Field trips may be required.

110. Intramural Leadership
   Lecture 2 hours.
   Instruction and practical experience in the organization and administration of the intramural sports program. Students will be required to coordinate and supervise an activity within the college program.

111abc. Intramural Sports Laboratory
   Prerequisite. Previous or concurrent enrollment in P.E. 110.
   Laboratory 3 hours.
   Practical experience in the organization and administration of the intramural sports program.
   Students will be required to coordinate and supervise an activity within the college program.
**ACTIVITY COURSES**

**120 Series:** Courses meeting 2 hours per week for 1 unit of credit.

- Badminton
- Basketball
- Body Mechanics
- Bowling
- Fencing
- Gymnastics
- Ice Skating
- Jogging and Conditioning
- Roller Skating
- Tennis
- Trampoline
- Volleyball

**130 Series:** Courses meeting 3 hours per week for 1 unit of credit.

- Football, Touch
- Golf
- Intramurals
- Mountaineering, Basic
- Skiing, Conditioning
- Skiing, Cross Country
- Soccer
- Water Skiing (Prerequisite: Intermediate Swimming Ability)
- Weight Training

**150 Series:** Courses meeting 5 hours per week for 2 units of credit.

- Alpine Skiing

**INTERCOLLEGIATE ATHLETICS**

These courses require daily practice plus travel time and competition with other colleges. **Prerequisite:** Consent of Instructor.

**160 Series:** (Men's Varsity Sports) Courses meeting 10 or more hours per week for 3 units of credit.

- Varsity Skiing

**PHYSICS**

**115abc. Technical Physics**

(a) **Prerequisite:** Math 101 or second year high school algebra. Math 102 recommended.
- Lecture 2 hours.
- Laboratory 3 hours.
  Principles of mechanics.

(b) **Prerequisite:** Physics 115a.
- Lecture 2 hours.
  Laboratory 3 hours.
  Principles of electricity, heat, and sound.

(c) **Prerequisite:** Physics 115b.
- Lecture 2 hours.

**POLITICAL SCIENCE**

**101. Constitutional Government**
- **Laboratory 3 hours by arrangement.**
  United States constitution and national government; California state and local government.

**105. Introduction to Political Science**
- **Lecture 4 hours.**
  Survey of basic tools and approaches by which political behavior and institutions can be analyzed.

**110. American Political Thought**
- **Lecture 4 hours.**
  Historical survey of American political doctrines and issues; influence of political traditions on American politics; contemporary American political issues.

**111abc. Practicum in the Democratic Process**

(a) **Prerequisite:** Consent of Instructor.
- **Lecture 1 hour.**
  Laboratory 3 to 6 hours.
  Practical experience in the administration of democracy at the local level. Students enrolled for three units will serve as interns in local government agencies (city or county).

(b) **Prerequisite:** Consent of Instructor.
- **Lecture 1 hour.**
  Laboratory 3 to 6 hours.
  Practical experience in the administration of democracy at the state level. Students enrolled for three units will serve as interns in state government agencies.

(c) **Prerequisite:** Consent of Instructor.
- **Lecture 1 hour.**
  Laboratory 3 to 6 hours.
  Practical experience in the administration of democracy at the federal level. Students enrolled for three units will serve as interns in federal government agencies.

**115. International Relations**
- **Lecture 4 hours.**
  Dynamics of interstate power relations; diplomacy and international
law; international, regional and supranational organizations; war and peace; foreign policy.

125. Comparative Political Systems
Lecture 4 hours.
Comparative analysis of major political cultures and systems in the Western and non-Western world.

PSYCHOLOGY

41. Psychology of Supervision
Lecture 3 hours.
Psychological principles as applied to business and industry.

101. General Psychology
Lecture 5 hours.
Behavior, motivation, perception, emotion, intelligence, learning, and thinking; concepts of human development.

102. Experimental and Biological Psychology
Prerequisite. Psychology 101.
Lecture 4 hours.
Laboratory 3 hours.
Psychological research; neural, mechanical, and chemical integrating systems of behavior; experimental design, collection of data, and reporting observations.
Field trips are required.

103. Social Psychology
Prerequisite. Psychology 101.
Lecture 5 hours.
Interrelationship between the individual and his social environment. Social influence upon motivation, perception, and behavior. Development of changes of attitudes and opinions. Psychological analysis of small groups, social stratification and mass phenomena.

130. Personal and Social Adjustment
Prerequisite. Psychology 101.
Lecture 5 hours.
Personality development; family relationships; social adjustment; factors modifying self-evaluation.

141. Industrial Psychology
Prerequisite. Psychology 101 and Psychology 103.
Lecture 5 hours.
Application of psychological principles to business and industry.

142ab. Psychology of Leadership
(a) Prerequisite. Psychology 101.
Lecture 4 hours.
Laboratory 3 hours.
Exploration of philosophy, principles, problems, and skills of leadership; group processes, communication skills, and intragroup relationships. Group leadership and interpersonal interaction.

(b) Prerequisite. Psychology 101.
Lecture 4 hours.
Laboratory 3 hours.
Interaction of the individual, the group and the total society; organizational and institutional behavior; humanizing organizations; research and trends; administration, organization, and management behavior.

143. Introduction to Group Dynamics
Prerequisite. Psychology 101.
Lecture 4 hours.
Group behavior and interpersonal processes; analysis of group interactions.

144. Creative Process in Groups
Prerequisite. Psychology 143.
Lecture 4 hours.
Creative process of small groups; understanding the creative potential in interpersonal relations.

145. Child Development
Prerequisite. Psychology 101.
Lecture 5 hours.
Growth and development of the child from prenatal life through early childhood.

146. Child - Family - Community Interrelationships
Prerequisite. Psychology 145 or consent of instructor.
Lecture 5 hours.
Understanding the child and factors influencing his behavior, growth and development. The influences of the family, peer groups, the school, and American culture.

147ab. Field Study Laboratory
(a) Prerequisite. Psychology 145 and 146, or concurrent enrollment in Psychology 146 and Consent of Instructor.
Lecture 1 hour.
Laboratory 15 hours.
Active participation with groups of children, preschool, kindergarten,
first, second, and third grades. Field trips may be required.

(b) Prerequisite. Psychology 147a. Lecture 1 hour. Laboratory 15 hours. Continuation of 147a, including those groups of children which the student may have omitted previously. Field trips may be required.

160. Personality
Prerequisite. Psychology 101. Lecture 5 hours. The physiological, behavioral, and cultural role of perception, learning and motivation in personality.

RECREATION

101. Introduction to Recreation
Lecture 2 hours. The nature, scope, and significance of leisure and recreation in our society. The background and importance of professional recreation in America, stressing leadership, programs, and facilities. Field trips may be required.

RESORT MANAGEMENT

1. Introduction to the Hospitality Industry
Lecture 3 hours. An introduction to the hotel-motel, food service, travel agency, and recreation businesses.

2. Hotel-Motel Management
Lecture 3 hours. Organization and operation of public lodging facilities.

3. Food Service Management
Lecture 3 hours. Menu planning, food purchasing, nutrition, sanitation, and food storage.

4. Hotel-Motel Housekeeping
Lecture 3 hours. The broad scope of the housekeeper position, stressing employee training, record-keeping, executive responsibilities, and use of equipment and materials.

5. Maintenance and Equipment
Lecture 5 hours. Provides essential technical information in electronics, air conditioning, plumbing, heating, electricity, acoustics, and other equipment to establish preventative maintenance routine and to make necessary operating decisions.

6. Merchandising the Hospitality Industry
Lecture 3 hours. Sales promotion and methods used to obtain public recognition and good will.

10. Law of Innkeeping
Lecture 3 hours. California innkeepers law: legal relationships between innkeepers and others; rights, duties and liabilities of innkeepers and their personnel. Rules to avoid lawsuits; legal pitfalls. Statutes and their effect.

SKILLS DEVELOPMENT

21. Developmental Reading
Lecture 1 hour. Laboratory 3 hours. Improvement of reading and study skills necessary for college level work. Emphasis placed on vocabulary comprehension, reading, study skills, and listening skills. May be repeated one time for credit.

60. Mathematics Skills Development
Laboratory 3 to 9 hours. Individual instruction and self-instructional materials in mathematics skills units.

1. Fundamental operations with integers and rational numbers.
2. Operation improvement skills in ratio, proportion, and percent.
3. Operation improvement skills in powers, roots, and radical expressions.

70. Writing Skills Development
Laboratory 3 to 9 hours. Individualized instruction and self-instructional materials in specific writing skills units.

1. Spelling
2. Punctuation
3. Diction and usage
4. Basic sentence structure
5. Advanced sentence structure
6. Basic paragraph structure
7. Advanced paragraph structure
8. Outlining
9. Organization and development of the thesis-oriented essay
10. Writing the term paper

80. **Reading Skills Development** (1-3)

*Laboratory 3 to 9 hours.*

Individualized instruction and self-instructional materials in specific reading skills units.
1. Vocabulary improvement and word study
2. Comprehension improvement
3. Rate improvement
4. Reading charts and graphs
5. Dictionary skills improvement
6. Reading skills in the content areas

90. **Study Skills Development** (1-3)

*Laboratory 3 to 9 hours.*

Specific study skills units available include:
1. Listening improvement
2. Note taking
3. Preparing for and taking examinations
4. Vocabulary improvement skills in various content areas
5. Spelling improvement
6. Dictionary skills improvement
7. Study formulas
8. Time management and scheduling
9. Supervised study and tutorial assistance.

**SOCIOLOGY**

101ab. **Introduction to Sociology** (5)

*(a)* *Lecture 5 hours.*

History and analysis of major theoretical concepts of sociology; man and his physical and cultural environment; society and personality with emphasis on the socialization process.

*(b)* *Lecture 5 hours.*

Population problems and geographic distribution; organization of people in groups such as class and caste, racial and ethnic, urban and rural; study of social institutions such as education; family, religion, and law.

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110. **Sociology of Social Problems** (5)

*Lecture 5 hours.*

Analysis of contemporary social problems in America; socio-cultural factors; theories, perspectives, and trends on crime and delinquency, race, and ethnic relations, poverty and family disorganization.

111. **Sociology of Crime and Delinquency** (5)

*Lecture 5 hours.*

Sociological analysis of criminal behavior related to social structure and the criminalization process. Juvenile delinquency related to the family, peer groups, community, and institutional structures. Roles of law enforcing and other community agencies in crime and delinquency control.

112. **Sociology of the Family** (5)

*Lecture 5 hours.*

The family as a social unit of interacting personalities; historical and structural development of the family life in different cultures; functions, duties, and problems of family life, factors underlying family disorganization.

115. **Ethnic and Minority Groups** (4)

*Lecture 4 hours.*

A study of racial, ethnic, and religious minorities with concentration in the United States. Includes the nature and origin of discrimination, prejudice, competition, and conflict; patterns of adjustment and trends in minority relations.

119. **Sociology of Women** (4)

*Lecture 4 hours.*

Study of woman's role in the modern world. Emphasis on the changing role of women in America: sex roles, alternative family structures, problems in the areas of employment, child care, legal rights, educational opportunities and political representation.

**SPEECH**

101. **Fundamentals of Speech** (5)

*Lecture 5 hours.*

Principles of oral communication; speech composition and techniques of presenting informal and formal speeches. Emphasis given to organization, ideas, critical thinking, and evaluative listening.
102. Oral Expression and Interpretation (5)
Lecture 5 hours.
Techniques in reading literature aloud; understanding and interpreting prose, poetry, and dramatic selections; oral presentation and expression of thought.

106. Voice and Diction (4)
Prerequisite. Speech 101.
Lecture 4 hours.
Critical self-analysis; oral communication drills and exercises for developing voice tone production and control, voice quality, articulation, and pronunciation.

115. Group Discussion (4)
Lecture 4 hours.
Communication processes applied to informal group discussion. Individual and group participation in problem solving discussions, parliamentary procedures, and various speaking activities.

122. Introduction to Readers' Theatre (4)
Lecture 3 hours.
Laboratory 3 hours.
Theory and practice of Readers' Theatre as an art form. Directed experiences in selecting, cutting, arranging, and performing the Readers' Theatre script.
Field trips may be required.

WORK EXPERIENCE

97. General Work Experience (1-4)
Prerequisite. Consent of Instructor.
The supervised employment of students with emphasis on desirable work habits and attitudes. The job held by the student need not be related to the occupational goal of the student. May be repeated for a maximum of 9 units.

98. Vocational Work Experience (1-4)
Prerequisite. Consent of Instructor.
Supervised employment in the occupation for which the student's college program has been designed. May be repeated for a maximum of 24 units (less any units earned for General Work Experience).
A Guiding Principle...

This College shall be responsive to the needs and desires of the total community. Moreover, this responsibility will transgress the artificial boundaries of town, county, or region in providing a meaningful expression of the occupational, intellectual, sociological, and cultural needs of this community.

ADULT AND CONTINUING EDUCATION

Columbia Junior College is committed to meeting the educational needs of the adults in our community. Through the Continuing Education program a variety of credit and non-credit classes are offered which fulfill requirements leading to an A.A. Degree, a high school or elementary diploma, or an assortment of vocational certificates. Most of these courses are offered during the evening at locations both on and off campus. Continuing Education courses are designed to provide opportunities to resume interrupted education, to investigate new fields of interest, and for general education for self-improvement and enriched living.

High School Diploma

High school courses, designed for adult students, are scheduled during the evening. The program is not open to students attending high school during the day. A student may be admitted to the College High School Program if he:

1. Is 18 years of age or older and not enrolled in day high school.
2. Is married, less than 18 years of age and not enrolled in day high school.
3. Is less than 18 years of age, but he is required to obtain a signed release from the superintendent in his high school district of residence.

Graduation requirements may be completed during any quarter. Diplomas are awarded at the close of the Spring Quarter. High school diplomas will not be awarded before a student’s normal graduation date.

The College will certify completion of courses which fulfill high school graduation requirements to the student’s high school district of residence. The high school of residence will officially award the diploma.

Units earned in the College High School Program are not applicable toward the Associate in Arts degree.

High School Placement Program

High school juniors and seniors may take classes at Columbia Junior College with written permission from their high school principal stating exact course or courses for registration.
Elementary Certificate

Classes are offered for adults who are interested in completing an elementary certificate or who need remedial assistance.

Residents are urged to contact the College Counseling Office for information about the Adult High School or Elementary Programs.

Services in the program include evaluation of previous academic credits, requirements for graduating, and course planning by the high school awarding the diploma. Information will be mailed on request.

HIGH SCHOOL COURSES

(Each course earns 6 credits toward a high school diploma.)

English I. Grammar, Composition, and Literature
Lecture 6 hours.
Reading, grammar, and composition skills with emphasis on sentence patterns, punctuation, vocabulary, and spelling.

English II. Intermediate Grammar, Composition, and Literature
Prerequisite. English I.
Lecture 6 hours.
Continuation of English I; emphasis on complex sentence patterns, grammar techniques and accuracy in writing.

English III. Advanced Grammar, Composition, and Literature
Prerequisite. English II.
Lecture 6 hours.
Continuation of English II; emphasis on advanced usage in grammar, writing, and reading.

United States History
Lecture 6 hours.
American history from English colonization to the present.

Civics: State, Local, and Federal Government
Lecture 6 hours.
Origin, development, structure, and functions of the state, local and federal government. Analysis of American democratic ideals and system of government compared with other forms of government.

General Mathematics
Lecture 6 hours.
Refresher mathematics with emphasis on operation and application of real numbers; fractions, decimals, and percentages.

General Science
Lecture 6 hours.
Introduction to science; concepts, techniques, and limitations of physical and biological science.
A Guiding Principle . . .
This College shall be committed to continuous planning, development, and evaluation. It shall seek and expect constant re-examination as a natural process for making appropriate modifications in every phase of its activities.
A Guiding Principle...

This College shall serve the total community. It will provide educational opportunities for all people of post high school age, regardless of socioeconomic class, level of aspiration, or previous performance. Thus, this College shall adhere strictly to the open-door policy.

COLUMBIA JUNIOR COLLEGE

History

Columbia Junior College and Modesto Junior College are the two community colleges located in the Yosemite Junior College District. The former Modesto Junior College District was expanded into the larger Yosemite Junior College District in 1964 by action of the district electorate. The district is geographically one of the largest in the State and transects more than 100 miles of the fertile San Joaquin Valley from the Coast Range on the west to the Sierra Nevada on the east. The boundaries include nearly 4,000 square miles encompassing all of Tuolumne and Stanislaus Counties and parts of San Joaquin, Merced, and Santa Clara Counties.

Because of an increase in student enrollment, the need for greater educational opportunities in the mountain counties, and the great distance involved in travel for students to attend Modesto Junior College, the Yosemite Junior College District Board of Trustees authorized the formation of Columbia Junior College and scheduled its opening for September, 1968.

More than 200 acres of forest and land adjacent to Columbia State Historic Park in Tuolumne County were acquired from the U.S. Department of Interior, Bureau of Land Management, as the site for Columbia Junior College.

Campus buildings are planned around San Diego Reservoir from which wooded foothills join the rugged majesty of the Sierra Nevada. In keeping with the historic atmosphere of the Mother Lode Region, the design concept of the campus is in the architectural style of early California during the Gold Rush Days.

In this unusual and picturesque setting, the College is committed to a comprehensive program of academic and occupational education which focuses on the worth and dignity of each student. Columbia Junior College is dedicated to serve the educational needs of all residents of post high school age with the most current and innovative educational program feasible.

Philosophy

This community college is dedicated to the worth and dignity of each student. Its primary responsibility is to the goals of the student, his needs, desires, and aspirations.
We believe an effective education teaches that one has a life to live as well as a living to earn. Columbia Junior College will, therefore, involve each student in opportunities for developing his capabilities to become a useful and contributing member of society. This objective will be accomplished through a living, dynamic, and continuing experience in which each individual can confront opportunities to participate actively in the learning process. In effect, education will not happen to him, but with him and by him.

Guiding Principles

Each student is a separate and unique individual who shall be accepted as such. It shall be the responsibility of each student and staff member to accept and perpetuate the philosophy of this college.

This College shall provide a focus on learning as an individual process that can best be accomplished through active involvement in a setting of reality. It shall be recognized that learning is a logical outgrowth of experiences that are meaningful to each student and not the rote acquisition of a specific body of knowledge.

The College shall be characterized by its flexibility in meeting student needs. Every facet of the institution shall expect and promote this quality.

This College shall serve the total community. It will provide educational opportunities for all people of post high school age, regardless of socioeconomic class, level of aspiration, or previous performance. Thus, this college shall adhere strictly to the open-door policy.

This College shall combine the strengths of the various disciplines, so that each will contribute to and support the bases used by students to reach their goals. No single instructional area or individual will be self-sustaining, but only as a component of the student's educational progress.

This College shall perceive achievement as a function of individual growth and not of time alone. Progress will not terminate at an artificial barrier, but continue on through the student's goal.

This College shall focus on student success. This will be accomplished by preserving an environment where each individual will have maximum freedom of choice. It will afford each student an opportunity to profit from education to the fullest extent of his capabilities.

This College shall be responsive to the needs and desires of the total community. Moreover, this responsibility will transgress the artificial boundaries of town, county, or region in providing a meaningful expression of the occupational, intellectual, sociological, and cultural needs of this community.

The personnel, functions, and services provided at this College shall be distinguished by their specific ability to meet the needs of students in reaching their particular goals. None shall base its existence upon the sole fact that it is a usual occurrence at a community college.

This College shall enable each student to acquire the trait of learning as a lifelong pattern. Learning will be considered a continuous process and not an isolated incident in given time or place.

This College shall require that each member of the faculty assume the dual roles of academic advisor in general and specific academic counselor in his discipline. This responsibility shall be apparent in student-faculty relationships and will not be the sole responsibility of Student Services personnel.

This College shall be committed to continuous planning, development, and evaluation. It shall seek and expect constant reexamination as a natural process for making appropriate modifications in every phase of its activities.

There shall be change with a purpose. Toward this end the College shall seek innovation, support creativity and imagination, while conformity for its own sake will be ignored. It shall consider technological and methodological advances which appear to have promise.

The natural and human resources adjacent to and beyond the campus shall be an integral part of the educational program. The College shall encourage student involvement in responsible citizenship.

College Functions

Implementation of the philosophy and guiding principles of this College shall be carried out through a variety of functions. These functions may be described as the actions the College will perform in meeting the defined needs of its students.

I. General Education Function

Provide a broad program of knowledge and skill acquisition
in the humanities, arts, and sciences for personal development.

General Education Definition
General education may be defined as a process of exposure to a variety of experiences that allow one to build a basis for meeting the challenges of life as they are encountered.

II. Transfer Education Function
Provide a comprehensive program that meets the lower division requirements for acceptance at designated institutions.

Transfer Education Definition
Transfer education may be defined as a required study pattern of bodies of knowledge needed to gain entry into a given field of endeavor at a specified four-year institution upon leaving Columbia Junior College.

III. Occupational Education Function
Provide specialized training programs needed to develop skills, knowledge, attitudes; and other occupational competencies.

Occupational Education Definition
Occupational education may be defined as the acquisition of specified skills and knowledge needed to develop vocational competencies.

IV. Ancillary and Consultive Education Function
Provide educational services of an ancillary and consultive nature to individual students and the community.

Ancillary and Consultive Education Definition
Ancillary and consultive educational services may be defined as that range of activities which complement the students' educational program and provide the community with immediate access to the unique resources of the college.

V. Remedial Education Function
Assist the student to acquire those basic competencies needed for effective participation in programs leading to his goal.

Remedial Education Definition
Remedial education may be defined as an activity designed to develop in students the basic skills needed to participate in the educational process.

VI. Occupational and Educational Planning Function
Provide an opportunity for students to attain personal goals through a program of realistic planning and direction.

Occupational and Educational Planning Definition
Educational and occupational planning may be defined as a logical process of individual and goal analysis that guides the student to perceive directions that might best serve his needs.

VII. Continuing Education Function
Provide continuing educational and vocational activities for adults.

Continuing Education Definition
Continuing education may be defined as that broad spectrum of activities that promote learning as an ongoing process of a changing adult life.

Accreditation
Columbia Junior College is accredited by the Accrediting Commission for Junior Colleges, Western Association of Schools and Colleges. All Courses have been approved by the State Department of Education and Veterans Administration.

The College is listed in directories of the United States Office of Education, the American Council on Education, and the Western Association of Schools and Colleges.

Appropriate lower division courses completed at Columbia Junior College will be accepted with full credit upon transfer to California universities and four-year colleges.

Institutional Memberships
Columbia Junior College is a member of Region 4, California Junior College Association, the Western Association of Schools and Colleges, and the American Association of Junior Colleges and is listed as a member institution by the State Department of Education and California Coordinating Council for Higher Education.

Community Services
Columbia Junior College is responsive to the community and extends opportunities for higher education beyond the scope of daily college life. It can furnish many special community services to enrich the cultural life of the Mother Lode area. Cultural events that could be scheduled include evening forums, concerts, plays, art exhibits, and lecture programs.

Faculty members may fill leadership and consultive roles in local organizations and projects and are available for speaking engagements.
A Guiding Principle . . .

This College shall require that each member of the faculty assume the dual roles of academic advisor in general and specific academic counselor in his discipline. This responsibility shall be apparent in student-faculty relationships and will not be the sole responsibility of Student Services personnel.
FACULTY

JOEL C. BARBER  
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B.B.A., University of Texas  
M.E., Abilene Christian College  

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B.A., California State University, Humboldt  
M.A., California State University, Humboldt  

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M.A., California State University, Fresno  

JOHN R. ROSS  Director of Instructional  
A.B., University of the Pacific  
Materials Center  

MELBORN N. SIMMONS  Mathematics  
B.S.E., Henderson  Chairman, Science, Mathematics  
State College  
M.S., University of Arkansas  

V. PETER SULLIVAN  Physical Education  
A.A., Modesto Junior College  Chairman, Health,  
B.A., Pepperdine  Physical Education, Recreation  
University  
M.A., California State University, Sacramento  

CLARENCE O. WOLGAMOTT, JR.  Chemistry, Physics  
B.S., Tennessee Technological University  
M.A., Tennessee Technological University
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1973-74

CATALOG ADDENDUM

Chemistry

112. Consumer Chemistry

Lecture 3 Hours.

A terminal chemistry course designed for those students having an interest in and concern for how chemistry affects the environment and their life.
ART

102d. Life Drawing (2)
Laboratory 6 hours.
Problems in figure drawing, working from the undraped model.

BUSINESS

113. Financing Business Enterprise (4)
Lecture 4 hours.
A survey of financial institutions; problems and solutions of providing capital for American business.

CHEMISTRY

130. Consumer Chemistry (3)
Lecture 3 hours.
A terminal chemistry course designed for those students having an interest in and concern for how chemistry affects the environment and their life.
HEAVY EQUIPMENT

15. Welding Non-Ferrous Metals (1)
Laboratory 3 hours.
Instruction and manipulation in welding of non-ferrous metals with the oxygen acetylene torch and the shielded arch process.

25. Recreational Vehicle Engine Repair (2)
Lecture 1 hour.
Laboratory 3 hours.
Maintenance and repair of all terrain vehicles, trail bikes, vans, buses, snowmobiles, motorcycles, and boat engines.

HISTORY

49. Local History (1-2)
Lecture 1-2 hours.
An introduction to Tuolumne County through the use of speakers, field trips, and informal discussions. Field trips are required.

MUSIC (Continued)

132. Beginning Woodwind (2)
Prerequisite. Music 100.
Lecture 2 hours.
Beginning performance methods and techniques on woodwind instruments.

133. Beginning Brass (2)
Prerequisite. Music 100.
Lecture 2 hours.
Beginning performance methods and techniques on brass instruments.

134. Beginning String (2)
Prerequisite. Music 100.
Lecture 2 hours.
Beginning performance methods and techniques on string instruments.

136. Beginning Voice (2)
Prerequisite. Music 100.
Lecture 2 hours.
Group instruction in the techniques of singing. Practice in correct tone production, diction, stage presence, and reading of musical notation by student.

150. Applied Music (1)
Prerequisite. Audition.
Lecture 1 hour.
Individual instruction in voice, piano, or instruments. One hour lesson per week with a private instructor chosen by the student and approved by the college music program.
MUSIC (Continued)

170. Symphonic Wind Ensemble (1)

Prerequisite. Ability to play band instrument and read music at sight. Enrollment subject to audition.
Laboratory 3 hours.

Study and performance of advanced wind ensemble literature. Attendance at all scheduled performances is required. May be repeated for credit.

NATURAL RESOURCES

110. Backpacking (See also P.E. 140) (2)

Lecture 1 hour.
Laboratory 3 hours.

Practical experience in the sport of backpacking. Selection and use of equipment, preparation, planning and physical performance of hiking and backpacking. Natural history interpretation related to backpacking experience. Field trips are required.

NATURAL RESOURCES TECHNOLOGY

30. Wild Edible and Useful Plants of the Sierra (2)

Lecture 2 hours.

Survey of wild edible and useful plants of the Sierra Nevada with particular emphasis on Tuolumne County. Use of plant identification keys. Method of collecting, preserving, and preparing plant material for domestic use. Historical uses of native plant material including Indian and 49'er. Field trips may be required.

PHYSICAL EDUCATION

120 Series: Courses meeting 2 hours per week for 1 unit of credit.

DANCE, Modern (Coed-Introductory)
Lecture 1 hour.
Laboratory 1 hour.

Introduction to modern dance movement. Fundamentals, basic movement and composition, presented and practiced as an opportunity for the student to express himself creatively through dance forms.

140 Series: Courses meeting 4 hours per week for 2 units of credit.

BACKPACKING (See also Natural Resources 110)
Laboratory 4 hours.

Practical experience in the sport of backpacking. Selection and use of equipment, preparation, planning and physical performance of hiking and backpacking. Natural history interpretation related to backpacking experience. Field trips are required.
PHYSICAL EDUCATION (Continued)

140 Series (Continued)

HORSEMANSHIP

Laboratory 4 hours.

Fundamentals of the Western style of riding, as well as the care of the horse and equipment, feeding, grooming, tack, shoeing problems, common ailments and their prevention. What to look for when purchasing a horse.

CANOEING AND KAYAKING

Prerequisite. Intermediate Swimming Ability.

Laboratory 4 hours.

Fundamentals of the sport of canoeing and kayaking. Background, theory, and practical experience on local waterways. Field trips are required.

MOUNTAINEERING (Intermediate)

Prerequisite. Basic Mountaineering or Consent of Instructor

Laboratory 4 hours.

Concentrated effort in the sport of rock climbing. Equipment selection and care, planning the climb, and practical experience in climbing. Field trips are required.

160 Series: (Men's Varsity Sports) Courses meeting 10 or more hours per week for 3 units of credit.

Varsity Golf
Varsity Tennis

PSYCHOLOGY

115. Introduction to Transactional Analysis  (2)

Lecture 2 hours.

Theory of transactional analysis and its application to the family, the classroom, and to social problems such as alcoholism or drug abuse.

135. Effective Interpersonal Communication  (2)

(See also Speech 135)

Lecture 2 hours.

Understanding and utilizing new techniques of listening, paraphrasing, and problem solving in an effective manner for better communication between parents, children, and other adults.

SPEECH

135. Effective Interpersonal Communication  (2)

(See also Psychology 135)

Lecture 2 hours.

Understanding and utilizing new techniques of listening, paraphrasing, and problem solving in an effective manner for better communication between parents, children, and other adults.

140. Communications Within Democratic Institutions

Lecture 2 hours.
Laboratory 3 hours.
Theoretical and practical study of the processes of communication extant in continuing public bodies.

TV Program Production (2-3)
Prerequisite. Consent of the Instructor.
Lecture 1 hour.
Laboratory 3-6 hours.
Theory and practice of creating short programs for the television medium. Story boards, script writing, directing, and camera techniques.

Survey of Education (3)
Lecture 3 hours.
Personal orientation to teaching as a paraprofessional. The goals and objectives of public education, the teacher's role, the school system and its organization; students as learners.

Teacher Aide Training (3)
Lecture 2 hours.
Laboratory 3 hours.
Preparation for teacher aide duties that assist teachers in the classroom learning process with emphasis on the school environment as the place for learning.

Intermediate Teacher Aide Training (3)
Prerequisite. Teacher Aide 20a or Consent of the Instructor.
Lecture 2 hours.
Laboratory 3 hours.
The classroom environment focused on the personalities in the classroom: teachers, students, teacher aides, and interpersonal relationships.