1991

General College Catalog 1990-1991

Salt Lake Community College

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SALT LAKE COMMUNITY COLLEGE

Salt Lake Community College At-A-Glance

Accreditation
Salt Lake Community College is fully accredited by the Northwest Association of Schools and Colleges

Programs
This catalog lists more than 100 programs and many different ways students may achieve their educational objectives

Offerings
Associate of Arts Degree (AA)
Associate of Science Degree (AS)
Associate of Applied Science Degree (AAS)
Diploma
One Year Certificate
Certificate of Completion

Student Body Profile
(Fall Quarter, 1989)
11,003* Students Head Count
6,819 Students, FTE
75% Freshmen
25% Sophomores
3% Veterans
53% Men
47% Women
89% Live in Salt Lake County
11% Other Utah Counties
1% Out of State and Foreign Countries
1% American Indian Alaskan
3% Asian/Pacific Islander
1% Black
4% Hispanic
Average Student Age 28

* Total of all budget related

Costs
$349 tuition and fees per quarter
(10 credit hours)

Student Faculty Ratio
23 students to 1 faculty member

Graduates
1,012 students graduated during the 1988-89 school year

INSTRUCTIONAL CALENDAR 1990-91

For registration dates, contact the Registrar's Office: 967-4298

Fall Quarter 1990

September 24	Classes begin
October 19-22	Harvest Holdiay
November 22-23	Thanksgiving
November 2	Last day to withdraw from classes
December 10	Last day of fall quarter classes

Winter Quarter 1991

January 2	Classes begin
January 14	Human Rights Holiday
February 18	Presidents Day Holiday
February 12	Last day to withdraw from classes
March 18	Last day of winter quarter classes

Spring Quarter 1991

March 26	Classes begin
April 5	Community College Conference (no classes)
May 27	Memorial Day Holiday
May 3	Last day to withdraw from classes
June 7	Last day of spring quarter classes
June 8	Graduation Ceremonies

Summer Quarter 1991

June 17	Classes begin
July 4	Independence Holiday
July 24-25	Pioneer Day Holiday
July 26	Last day to withdraw from classes
August 28	Last day of summer quarter classes

Mission Statement

Salt Lake Community College is an open door, student-focused, community oriented college offering a comprehensive curricula of less than baccalaureate degrees. This comprehensive curricula reflects the vision of universal education and life-long learning by providing unique and innovative education and training opportunities for occupations, college transfer, adult and continuing (community) education, developmental programs, avocational and other general education and related activities.

Applied Technology Center

SLCC is officially recognized in the Utah State Master Plan for Vocational-Technical Education as the applied technology center (ATC) for the Wasatch Front South Region. As funding is provided, SLCC is enthusiastically expanding this portion of its mission.

Affirmative Action/ Equal Opportunity Statement

Salt Lake Community College is an equal opportunity institution providing educational and employment opportunities without regard to race, color, national origin, age, sex, or handicap.

Inquires concerning the application of Title VI Title IX, or Section 504 may be referred to Salt Lake Community College (Director, Personnel Services/Equal Opportunity, Room 160, Administration Building, 967-4210), or the Regional Director, Department of Education, Office for Civil Rights, 1961 Stout Street, Denver, Colorado 80924.

Handicap Statement

SLCC assures access to disabled students including individualized assistance and resources to enhance his/her ability to function independently within the educational environment. Final approvals, as required, are given by the Institutional Council.

Cover Photo: **Award winning design of the second floor of the SLCC College Center by architects: Astle-Ericson & Associates. Photograph by Noel Barnhurst**

Salt Lake Community College
Catalog 1990-91

SLCC CAMPUSES

Redwood Road Campus
4600 South Redwood Road
967-4111

The first classroom building was put to use in March, 1967, when 600 students transferred from the former downtown location of the college. There are now six major classroom-lab buildings at the college's main location, plus the College Center - the students' social hub.

International Airport Campus
440 North Sperry Way
355-2527

Situated on the east side of the Salt Lake International Airport, this facility is used by aviation maintenance technician students. A spacious hanger with several aircraft connects with classroom and lab facilities. However, rooms are used also in the evenings for other courses.

Riverside Campus
1040 West 700 South
328-5500

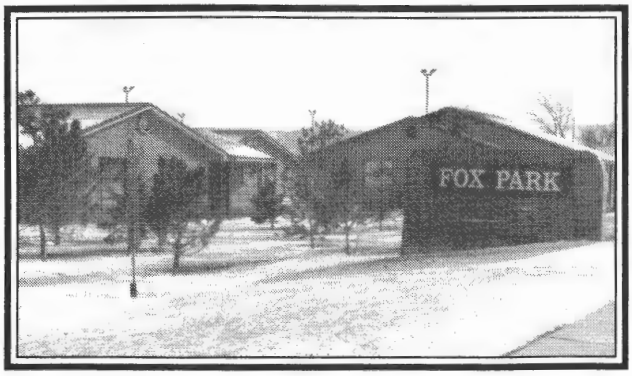
This is the headquarters for the Skills Center division of the College, accommodating approximately 700 students. Located in the Poplar Grove-Riverside section of Salt Lake's west side. A new trades occupations building is adjacent to the principal building.

South City Campus
1700 South State Street
Projected Completion Date 1991

The refurbished former South High School property is scheduled to open in the early part of 1991. Among other amenities it contains a first-class swimming pool, gymnasium and a 1,700-seat theater auditorium. It will be a full-service campus for downtown and east-side residents.

Sandy Campus
830 East 9400 South
571-3717

This stand-alone building has been in use since the fall of 1988. It is a part of the Sandy Mall, and presently serves more than 1,200 students. Ample parking is available. This structure has the possibility of further expansion to accommodate many more students, as necessary.



West Jordan Center
9221 South Redwood Road
566-4105

Opened in March, 1990, at Fox Park in West Jordan, the Center is beginning to service the needs of residents in the southwest quadrant of the Salt Lake area. It occupies a stand-alone building and contains four classrooms and some office space. Adjacent parking is available.

A Message from the President

Welcome to Salt Lake Community College. Let me tell you a little about us.

When I became president of this college in 1981, we had 6,300 students, 75 percent of them men. I have been pleased to witness our enrollment increase to more than 11,000, with a nearly even ratio of men and women. Yet with our increasing numbers we are still able to maintain a ratio of about 23 students to each instructor.

Although a growing proportion of our students come straight from high school, the average student age is 29. Evening students make up about 30 percent of our enrollment, and we have expanded services to them through telecourses and Saturday classes.

SLCC offers more vocational (job-related) classes than any other college in Utah. We have also responded to the demand for more academic classes, which includes the addition of programs in humanities and pre-engineering. And a registered nursing program, added to the existing practical nursing program, will graduate its first class this year.

In total, we offer classes in more than 100 programs. We also have 40 Advisory Committees to help insure that classroom curriculum meets the demands of the job market.

We provide classes at five locations, including: Redwood Road, Riverside, Sandy, West Jordan, and the International Airport. Our South City campus, scheduled to open this winter, will serve an additional 5,000 students. We will also open a new lab building for child development, and a new computer lab in the college center later this year.

Also at the main (Redwood) campus, ground will be broken for a library building in the fall, which will provide six times the space of current library facilities. And preliminary plans for a new classroom building were recently approved by the Legislature.

On the social side, the college sponsors some 25 student clubs. Some are purely social, others are professional associations that, in addition to networking, offer local, state, national, and even international competition. There are opportunities to participate in intramural sports events, dances, guest lectures, concerts, etc. We have a games room, crafts center, weight training room, and even a health center.

But probably the best news to many of you is that tuition charges at SLCC averages nearly 30 percent less than at state four-year institutions.

We hope your stay at SLCC will be beneficial. We want to help you meet your individual educational needs - once we know exactly what those needs are. We encourage you to visit the Student Services area on the second level of the College Center.

Sincerely,

O. D. Carnahan

Dr. O. D. Carnahan, president
Salt Lake Community College

HOW TO USE THIS CATALOG

General College Information. This section provides information about admission procedures, fees and expenses, financial aid, scholarships, student employment, facilities, student services and special programs. It also explains the requirements necessary to complete the various certificates, diplomas and degrees. Many of our students transfer their SLCC credits to 4-year colleges and universities.

Academic Programs. The schools and divisions are listed with the programs they supervise at the first of this section. Following this, the programs are all listed in alphabetical order. The programs are described and a listing of requirements outlined. A check-off space is provided next to each required course to assist the student in assessing progress in completing programs.

Course Descriptions. All descriptions of courses are listed in alphabetical order. After finding the courses under the Academic Program listing, the student should look here for the complete description of the course.

Governance and Administration. This section outlines who does what in the college's schools, divisions, and departments. It also lists the credentials of faculty and professional staff.

Read the catalog carefully and then check with advisors or faculty to be certain requirements are the same as when the catalog was printed. This may save you the time and expense of taking classes you do not need, or the distress of finding out too late that there are classes you have not taken. Always check the Quarterly Class Schedule for day/evening availability and modifications caused by varying enrollment.

Changes in Laws, Rules and Policies

1. Although every effort has been made to assure the accuracy of the information in this catalog, students and others should note that laws, rules and policies change periodically. Often, such changes alter the information contained in this publication. It is not possible in a publication of this size to include all of the rules, policies and other information which pertain to the student or Salt Lake Community College. More current or complete information may be obtained from the appropriate department, division, school, or administrative office. We recommend that you check with them before making decisions. Changes may be implemented without prior notice and without obligation and, unless specified otherwise, are effective when made.

Nothing in this catalog shall be construed, operate as, or have the effect of an abridgement or a limitation of any rights, powers, or privileges of the Board of Regents of the State of Utah, the Institutional Council, or the president of Salt Lake Community college.

This catalog does not constitute a contract or the terms and conditions of a contract between the student and the institution. The relationship of the student to the institution is one governed by statute, rules, and policy adopted by the Legislature, the Regents, the Institutional Council, President and their duly authorized designees.

2. Advisors are provided to assist students in planning academic programs. They are not authorized to change established policy. Students are solely responsible for assuring that their academic programs comply with College policy. Any variance with established policy must be confirmed by a Dean.

3. The College has the right to terminate or modify programs and/or program requirements, content, and the sequence of program offerings from quarter to quarter for reasons it deems sufficient to warrant such action.

4. Course descriptions are based on reasonable projections of faculty, faculty availability, facilities, and curriculum considerations. They are subject to change based on changes in circumstances.

5. The accreditation, approvals and certifications of the College are based on the institution's status at the time of printing this catalog. They are subject to review and modification from time to time.

6. SLCC disclaims liability of any kind for injury or illness of students as a result of participation in activities connected with the College. Every reasonable effort is made to provide safe conditions for conducting all activities.

TABLE OF CONTENTS

GENERAL COLLEGE INFORMATION

ACADEMIC PROGRAMS

COURSE DESCRIPTIONS

GOVERNANCE and ADMINISTRATION

GENERAL COLLEGE INFORMATION

ADMISSION

College Center, Second Level
967-4297

Admission Policy

Salt Lake Community College welcomes students for admission to any course of study for which their qualifications indicate they can benefit, without regard to marital status, race, color, creed, sex, national origin, or status as a handicapped individual, disabled veteran or veteran of the Vietnam era.

Admission Procedures

All prospective Salt Lake Community College students must apply through the Admissions Office. Submission of the application should be in accordance with the Application Priority Preference Dates listed in this section of the catalog.

There are two admission choices from which to select. The first is to become a fully matriculated student, working toward a Certificate, Diploma, AAS, AS or AA degree. The second choice is to be admitted as a non-matriculated student.

To matriculate, a prospective student must do the following:

1. Submit a completed Application for Admission as a matriculated student.
2. Pay a $20 non-refundable application fee as a matriculated student.
3. Provide evidence of past educational experience (such as official copies of high school or previous college transcripts or record of GED completion).
4. Take the college placement test prior to registration for classes.

The Placement test is given at the main campus several times weekly; call 967-4269 for testing information. ACT scores which are less than three years old can be used in place of the SLCC Placement Test for matriculation; however, a student whose ACT math score is below 17 must take the test for placement in mathematics. Students who have taken English and math classes at another college or university may not be required to take the Placement Test; contact the Admissions Office for further information.

A student must be matriculated to be considered for financial aid.

Students not interested in pursuing a Certificate, Diploma, or Degree can be admitted as non-matriculated students. To apply as a non-matriculated student, submit only the Application for Admission as a Non-Matriculated Student and $5.00 application fee; no testing or previous transcripts are required. This choice limits the ability to use credits toward graduation. It also prohibits students from receiving financial aid through the College.

Credit earned as a non-matriculated student may not count toward a degree at SLCC unless the student matriculates. No more than 24 credits earned before matriculation may be counted toward a Diploma or Degree, and no more than 12 may be counted toward a One Year Certificate.

Students who, at registration time, have not submitted transcripts and test scores may be admitted on a non-matriculated basis.

Immigrant students whose primary language is not English will be required to take the CALT Test to assist in determining First Quarter classes. The CALT Test can be used to matriculate immigrant students.

Admission into a Major

Some departments require additional procedures (interview, special application form, portfolio, or prerequisite course performance) or preparation before students are admitted into a specific major. Students must contact the department or the Admissions Office for specific criteria.

Readmission of Former Students

Students returning to the College after an absence of two full years must make application for readmission and pay the $20 application fee.

Those who have attended other colleges or universities in the interim may be asked to submit transcripts of all college or university credits.

Students returning after an absence of two consecutive quarters, excluding summer quarter, will be required to meet graduation requirements as shown in the College catalog which is in effect at the time of their return to the College.

Enrollment Prior to High School Graduation

Salt Lake Community College occasionally admits academically qualified high school students for enrollment in college classes while they are still enrolled in high school classes. Students who wish to take classes at SLCC before their high school class has graduated must submit the same materials required for matriculation (see above), plus the following:

1. Letter of permission, on high school letterhead stationery, from high school principal, vice-principal, or counselor.
2. Letter of permission from the student's parent(s). Such students must also schedule an interview with an Admissions Office staff member before they can be admitted.

Application Priority Preference Dates

In general, priority for enrollment is determined by the order in which completed applications are received. Applications are normally submitted from one to three months before the quarter in which the student plans to enroll.

Priority preference dates for filing applications are as follow:

Fall Quarter:	July 1
Winter Quarter:	November 1
Spring Quarter:	February 1
Summer Quarter:	May 1

Applications for admission are accepted on a continuous basis until classes begin, and students applying for admission after the preference dates will be assisted in registering for classes on a second-priority basis.

Students applying for freshman tuition waiver scholarships (which are awarded for a full academic year, fall through spring) must complete admission requirements by April 1.

Orientation and Advising

All applicants who have met the priority preference deadlines (see above) will receive invitations to attend an Orientation/Registration workshop program to help them learn about course requirements, college policies and procedures, and class scheduling. Individual advisement is available during these workshops. Registration workshops are held before the start of every quarter and are divided into groups of related majors.

New students are also invited to meet with an admissions advisor in the College Center for help in learning about general college requirements, academic programs, and registration procedures. Those who need more extensive help (such as choosing a major or exploring possible career choices) should contact the Center for Career and Academic Advising.

Computer Literacy

Basic computer competencies are recognized as being important in today's society; consequently technological training is required in most departments of the college.

Some programs require computer literacy prior to entrance into the program; others require computer literacy as a part of the required curriculum. Check your area of study for specific computer literacy requirements.

Waiver and Transfer Credit

Students who wish to transfer credits from other colleges or universities must request that official transcripts be sent from each previous institution directly to the Admissions Office. Hand-carried transcripts can be accepted only if they are delivered unopened, in the original envelope from the issuing institution and bearing the official school seal. Transcript request cards and "Request for Evaluation of Transfer Credit" forms are available in the Admissions Office.

General Education credits from other colleges are evaluated by the Admissions Office and credits accepted are transferred and recorded. Transfer credit evaluations are done only for matriculated students and are completed after the student has enrolled in first-quarter classes. Grades of "D" or "E" are not accepted. A grade of "C-" is not accepted if it is earned in a class that requires a "C" or higher as a prerequisite. For an explanation of General Education Credits, see pages 10 & 11.

Credit by Examination

Students may earn a maximum of 50 quarter hours of credit through the following examination programs: Advanced Placement (AP), Challenge Examinations, and College Level Examination Program (CLEP). Credit earned through CLEP and AP exams is not counted as in-residence credit.

Advanced Placement Examination

High school students who achieve scores of 3, 4 or 5 on an Advanced Placement (AP) examination, according to the description published by the Committee on Advanced Placement of the College Entrance Examination Board (CEEB), may be awarded up to 12 hours of college credit for each examination completed. SLCC will recognize Advanced Placement with credit only for those freshman-level areas which apply to the graduation requirements of the specific major and the established general education requirement for graduation from the chosen program.

Challenge Examinations

Students who desire to accelerate their programs and receive credit for previous experience or knowledge should apply to the appropriate department advisor.

If students feel they know the material in a given course, they can take a test and if successful, receive college credit. (Challenge Examinations are not available in all classes and are subject to approval by the division.)

Students who want to take advantage of Challenge Examinations must check with the Registrar's Office in the College Center.

Upon successful completion of the examination and other requirements specified by the instructor, students receive a passing grade (P) for the class.

College Level Examination Program (CLEP)

CLEP is a national program of examination to evaluate and confirm the academic achievement of individuals who have reached a college level of education through either traditional or non-traditional means of study. Two types of exams are available: General Examinations, which cover broad, basic liberal arts areas, and Subject Examinations, which cover the content in specific, widely-taught undergraduate courses.

Credit is not awarded if duplicated by previous course work, and credit is not given for the Mathematics General Examination. A $37 non-refundable fee (per test) is required at or before the time of testing. To arrange CLEP testing, contact the Assessment Center at 967-4269.

CLEP credit in general education areas is awarded as follows:

Exam	Sub Score	Credit Awarded
English	500†	*8 hrs
Natural Sciences		
Physical Science	45	**3 hrs
	47	**6 hrs
	50	**10 hrs
Life Science	45	‡3 hrs
	47	‡6 hrs
	50	‡10 hrs
Humanities		
Fine Arts	45	~3 hrs
	47	~6 hrs
	50	~10 hrs
Social Science	450	~~3 hrs
	475	~~~ 6 hrs
	500	~~~10 hrs
Foreign Language	50	+*15 hrs

† If taken after May, 1986
+* Entire requirement
‡ (LS group) including LS 121
* English 101 and 102
** (PS group)
~ (HU group)
~~ (SS group)
~~~ (SS group) including His 170 or PS 110

Policy on Transfer of Credits

Intended wholly to meet an institution's general studies requirements

An Associate of Arts or an Associate of Science degree earned in any institution within the Utah System of Higher Education will be considered as meeting the general education requirements of any institution in the System.

When the general education requirements of an institution have been met, a Registrar's certification that the transferring student has completed baccalaureate-level general education requirements at the sending institution will be accepted by the receiving USHE institution in lieu of the AA/AS degree.

In the latter case, the Registrar at the sending institution will forward to the receiving institution an up-to-date description of the general education requirements.

Policy on Transfer of Credits

Other than those intended wholly to meet an institution's general studies requirements

Credits for courses numbered 100 or above earned in the Utah System of Higher Education are transferable within the System and will be carried on the student's transcript by the receiving institution. Acceptance of credit should not be confused with its application. Transfer credit may or may not apply to the graduation requirements of an institution, regardless of the number of credits transferred.

Credit other than that intended wholly to meet the general education requirements of the receiving institution will be applied on the basis of appropriateness of credit to a particular institution's specific degree program requirements as determined by the receiving institution.

Salt Lake Community College has established articulation agreements with State institutions and other colleges and universities. If you have questions regarding the transferability of courses and programs, please contact the Admissions Office or the Dean of your respective department.

Determination of Residency

A student who clearly demonstrates that the move to Utah was not academically motivated but was for permanent domiciliary reasons can be considered for residency status. An application for residency status and a pamphlet defining the rules and regulations that determine resident status at the college are available in the Admissions Office.

International Students Admissions

All international students requesting admission must complete special requirements in order to be approved, and receive an I-20 Certificate of Eligibility from the College through the Office of Academic Standards. The I-20 document must be presented to an American Consul or Immigration office to receive an F-1 Visa (student status) or M-1 Vocational for entry into the United States.
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For students outside the U.S., the application deadlines for each quarter are as follows:

Fall Quarter:	June 1
Winter Quarter:	October 1
Spring Quarter:	January 1
Summer Quarter:	April 1

The steps include:

1. Application for admission and application fee.
2. An official copy showing results of the TOEFL (Test of English as a Foreign Language) with minimum score of 450. Students scoring between 450 and 499 will be required to take at least one quarter of ESL (English as a Second Language). The Michigan Test (MELAB) may be substituted in place of the TOEFL. Students scoring between 76-81 will be required to take at least one quarter of ESL. A score of 82 will allow a student to enter his/her major.
3. Affidavit of financial support. Forms are available in the office of Academic Standards.
4. Official transcripts of credit from each secondary school (12th grade equivalency required), college and university attended. The minimum overall grade-point average is 2.0 (C average) for consideration for admission. Official English translations must be included with the transcripts.

International students are not eligible for financial aid through the College or the United States Government. Employment is not authorized off campus. The College does not have campus housing, and international students are responsible for locating housing as well as transportation to and from campus.

It is recommended that international students obtain appropriate hospitalization and health insurance through private sources while attending school. Applications for admission and steps for applying are available from the Office of Academic Standards.

REGISTRATION

College Center, Room 220
967-4298

Prior to the beginning of each quarter, students will register for classes according to instructions given in the class schedule. The schedule is printed quarterly and contains a listing of classes taught, as well as policies and procedures relating to registration, adding or dropping classes, tuition payment, refunds, challenging of classes, and deadlines.

Registration is only complete when all materials have been turned in and tuition and fees are paid in full. Payment deadlines are listed in the class schedule. Students must complete registration by the end of the third week of each quarter.

Senior Citizen Registration

Senior citizens age 62 and over are invited to enroll in any regular class offered at SLCC on a space available basis. Space availability is determined during In-Person Registration. A quarterly $10.00 registration fee is required, which will cover all costs except books, supplies, parking and lab fees.

Adds, Drops, Withdrawals

Students should follow the procedure outlined in the class schedule. No extra charge is made for adding or dropping classes.

ADDS: Classes may be added during scheduled registration periods before the quarter begins. Beginning the first day of the quarter, classes may be added with an instructor's written permission. No classes may be added after the third week of the quarter.

DROPS: Classes may be dropped during scheduled registration periods before school begins. Students may drop classes during the first three weeks of the quarter and receive a refund according to the refund schedule printed in the class schedule. No entry is made on the student's record for classes dropped before the end of the third week of the quarter.

WITHDRAWALS: Students should immediately withdraw from classes they are not attending or receiving credit for. Those who do not officially withdraw from a class will receive a "UW" grade, which is equivalent to an "E".

Students may withdraw from classes through the sixth week of the quarter prior to the published deadline. Students wishing to withdraw from classes after the sixth week may do so with permission of the instructor and Division Chair or Dean. No withdrawals will be accepted after a final exam has been given. No refunds are given for classes withdrawn from after the third week. A "W" grade will be recorded on the student's record.

How to withdraw from classes:

1. Obtain a Withdrawal Form at the College Center Courtesy Desk or the Registrar's office.
2. Complete the form with required information, including the classes you're withdrawing from.
3. Obtain instructors' signatures for all classes listed.
4. If after sixth week, obtain signature of Division Chair or Dean.
5. If receiving financial aid or VA benefits, arrange an exit interview with the appropriate office.
6 Return the completed Withdrawal Form to the Registrar's Office by the deadline printed in the current class schedule.

Tuition and Fees

The following cost schedule applies to all students taking credit classes day or evening. Non-credit and special class tuition will be listed individually in each quarter's class schedule.

1990-91 Academic Year

Credit Hrs.	Resident	Non-Resident
1	$75	$194
2	105	277
3	137	361
4	168	445
5	199	529
6	230	613
7	258	694
8	291	779
9	320	861
10	349	943
11	365	992
12	380	1040
13	391	1075
14	402	1110
15	413	1146
16	424	1181
17	435	1216
18	446	1251
19	457	1286
20	468	1322
21	490	1392
22	512	1462
23	534	1533
24	556	1603
25	578	1674

Additional tuition is charged for each credit hour over 25. Approval for the additional hours over 20 must be obtained from the appropriate division chairperson. Non-resident tuition is not charged Summer quarter. Tuition charges appearing in the catalog and other College publications are subject to change without notice.

Dishonored Checks

All dishonored checks will be turned over to "Check-Rite" for collection purposes. Students whose checks are dishonored by the bank are charged $15.00 handling fee per check. If the check is for tuition, and there has been no response within 10 days from the date the check is returned to the College, the student shall be withdrawn from the school.

If the dishonored check is not reimbursed to the college, a hold shall be attached to the student's records and he/she shall not be entitled to an official copy of grades or transcripts, or diplomas until the amount thereof has been paid to the college or otherwise satisfied. It will be the responsibility of Accounts Receivable in the Cashiers Office to release record holds at such times as checks are redeemed. The collection of dishonored checks may involve legal prosecution if necessary.

Non-Resident Fees

A non-resident of Utah is required to pay a special fee. Living in Utah merely to attend Salt Lake Community College does not constitute resident classification.

To qualify as a resident, an adult must present objective evidence of intent to become a permanent resident of Utah and abandon residence elsewhere. Normally an adult must live in Utah for one continuous year prior to the start of an academic quarter for which registration as a resident student is requested. An application for residency status and a pamphlet defining the rules and regulations that determine resident status at the College are available in the Admissions Office.

Refunds

When a student withdraws from the College or drops individual classes during the first three weeks of any quarter, he/she is entitled to a refund of tuition and student fees according to the following:

1. When a new student officially withdraws, refunds are based on withdrawal date regardless of class attendance. Refunds to students on financial aid will go to Title IV programs first.

2. Application fees are non-refundable.

Schedule for classes that follow regular quarter beginning and ending dates:

Refund Period	% Refunded
Through seventh calendar day of quarter	100%
Through fourteenth calendar day	70%
Through twenty-first calendar day	50%
After twenty-first calendar day	No Refund

Schedule for classes with beginning or ending dates that do not correspond with regular quarter beginning or ending dates:

Refund Period	% Refunded
Through 10% of class taught	100%
Through 20% of class taught	70%
Through 30% of class taught	50%
More than 30% of class taught	No refund

All refunds are mailed to the student's local address. If the initial payment was by cash, the check is mailed usually within two weeks. Initial payments by check are mailed after they have been cleared by the bank, usually within four weeks. If initial payment was by Bankcard the refund will be credited back to the Bankcard account.

Records

The permanent record (transcript) of each student's academic achievement is kept in the Registrar's Office. Skills Center records are available through Riverside Campus. Copies of transcripts are available upon the written request of the student. Transcript request forms are available at the College Center Information Desk. The cost for each transcript is $2.00. Any financial obligation owed to the College must be cleared before a transcript can be released. A transcript can only be released to the student or to whom he/she designates in writing.

Confidentiality of Records Policy

The Privacy Rights of Parents and Students Act was designated to protect the privacy of education records, establish the right of students to inspect and review their education records, and provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Education Rights and Privacy Act Office. Questions may be referred to the Registrar's Office.

Personally identifiable information or records relating to a student will not be released to any individual, agency, or organization without the written consent of the student, except Directory Information, which may be released upon request unless the student specifically withholds permission to do so. Directory Information includes:

1. Student's name
2. Address
3. Telephone number
4. Class schedule
5. Date and place of birth
6. Major field of study
7. Dates of attendance
8. Degrees and Awards received
9. Most recent previous educational agency/institution
10. Participation in recognized activities/sports

To withhold the release of directory information, a student must complete the proper form in the Registrar's Office (CC 220) before the quarter begins.

Grades and Reports

Grades are available approximately two weeks after the end of each quarter. Performance is graded as follows:

A = 4.0 Superior Grade
A- = 3.7
B+ = 3.4
B = 3.0 Above Average Grade
B- = 2.7
C+ = 2.4
C = 2.0 Average Grade
C- = 1.7~
D+ = 1.4
D = 1.0 Lowest Passing Grade
D- = 0.7~~
E = 0.0 Failing Grade
UW = 0.0 Unofficial Withdrawal
P = Passing Grade
I = Incomplete Grade*
W = Withdrawal
AU = Audit**
EX = Extension***

Students must complete, by the end of the quarter, all courses for which they register.

* Incomplete grades can be granted by the instructor only under extraordinary circumstances. All "incompletes" must be made up within 12 months or they will be changed to an E.

** AU grades are given for audit classes, i.e. students do not take examinations or do assigned work. A student auditing a class will not receive credit for the class.

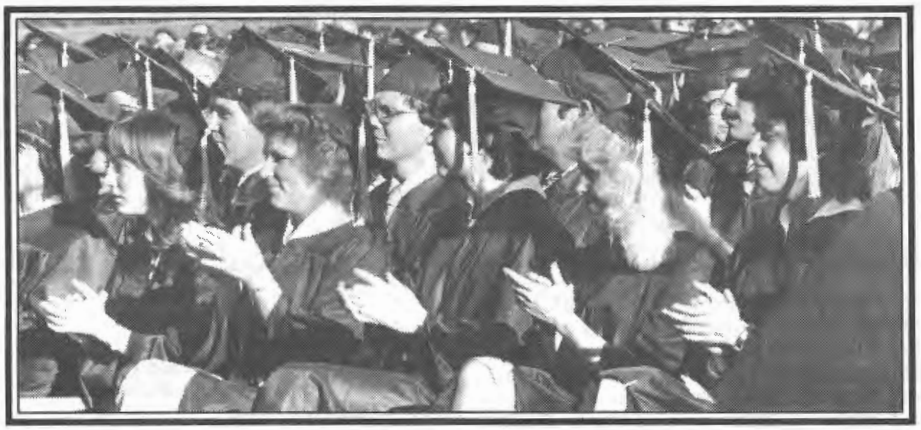
***EX grades are allowed only in Developmental Studies classes. Students need to re-register for the class and pay the tuition. The EX grade must be completed within a year, or it will be changed to an E.

~ A "C-" grade is not acceptable in a class where a grade of a "C" grade or better is required.

~~ A class in which a D- has been earned cannot be counted for graduation.

Repeat Courses

A student may repeat a course in which a low grade has been received. The student must notify the Registrar's Office at the end of the quarter in which the class was repeated. The original grade remains on the record and is marked as a repeated course. The highest grade received in the course will then be used in calculating the student's cumulative grade-point average.



STANDARDS OF ACADEMIC PROGRESS

College Center, Second Level
967-4077

Students are encouraged to ask for personal assistance with all areas of the college experience. Problems ranging from academic to personal may be discussed with faculty, division chairs, Deans and Student Service personnel.

Through the Office of Student Planning and Assessment a student may receive help in selecting an academic program, setting academic goals and preparing to graduate. Salt Lake Community College takes pride in giving personal assistance to students in their effort to maintain satisfactory progress in their academic pursuit.

To graduate from Salt Lake Community College, a student must have an overall cumulative grade point average (CUM G.P.A.) of 2.0. A student earning less than a "C" grade average (2.0 G.P.A.), is notified on the Quarterly Grade Report of his or her current status: Academic Referral and Academic Warning. Students with questions regarding these conditions are directed to the Office of Academic Standards.

Academic Referral

A student who receives a Quarterly Grade Report indicating work below a 2.0 GPA is automatically placed in the Referral category. A letter is mailed to the student asking the student to confer with the Office of Academic Standards regarding a plan to improve grades. Students receiving any financial aid or support from other sponsoring agencies must also contact those agencies regarding guidelines for continuing that support.

Academic Warning

A student earning less than a 2.0 G.P.A. for two or more consecutive quarters is automatically placed in the Warning category. This student is contacted by mail and again asked to meet with the Office of Academic Standards to review areas which may be improved in order to assure better performance in class. Sponsoring agencies are notified of student grades and students need to contact their sponsoring agency to review continued funding.

The emphasis in all of the above counseling situations is on assisting the student toward graduation, success in class, developing reasonable goals, and satisfactory completion of the student's personal and educational goals.

Honor Roll / Honors at Graduation

To qualify for the quarterly Honor Roll (Dean's List), a student must earn a 3.5 grade-point average in 15 or more credits. To qualify for the quarterly President's Honor Roll (President's List), a student must earn a 3.8 grade-point average in 15 or more credits. Students who complete course work with a 3.5 cumulative grade-point average will be awarded honors at graduation.

GRADUATION

College Center, Second Level
967-4035

To be eligible for graduation from Salt Lake Community College, a student must:

1. Maintain a 2.0 cumulative grade-point average of all course work.
2. Take 25 percent of required credits directly from Salt Lake Community College.
3. Apply for Graduation.
4. Qualify for one of the following:

Certificate of Completion

Recognizes the completion of requirements in **non-credit** short-course and open-entry/open exit programs.

One Year Certificate

Awarded after satisfactory completion of a minimum of 48 quarter credit hours in a prescribed course of study.

Diploma

Awarded after satisfactory completion of a minimum of 96 quarter credit hours in a prescribed course of study. (Most courses require more than 96 credit hours.) The course includes general education, theory and laboratory classes.

Associate of Applied Science Degree

(Minimum 96 Credit Hours Required)
Awarded after satisfactory completion of a minimum of 96 quarter credit hours in a prescribed course of study. (Most programs require more than 96 credit hours.) The course includes general education, core academic skills, and technical classes.

This degree is not transferrable to a four-year institution. Students desiring to transfer to four-year colleges, should take programs leading to an Associate of Science or Associate of Arts degree.

General Requirements (29 credits)

Core Academic Skills
Communications - 3 credits
ENG 101 (English Comp) - 4 credits
Math - determined by department
Reading - determined by department

General Education
Interdisciplinary Course (INT)* **(5)

COM	150	Intro to Mass Com	5
HU	101	Intro to Humanities	5
HU	275	Philosophy in Lit	5
TECH	101	Tech and the Citizen	5

Choose a total of 12 hours from at least three of the following areas.

Biological Science (BS)

BIOL	101	General Biology	5
BIOL	105	Intro to Human Anatomy & Physiology	5
BIOL	120	Botany	5
BIOL	130	General Zoology	5

Humanities (HU)

COM	101	Basic Communication	3
ENG	250	Intro to Literature	5
FA/HU	110	Art Appreciation	3
HU	102	Ancient to Renaiss	5
HU	103	Enlight - Mod Day	5
HU	111	Survey Art History	5
HU	112	Hist Modern Art	5
HU	241	Great Books	3
HU	242	Great Books	3

Physical Science (PS)

CHEM	101	Intro to Chem	5
GEOL	101	Physical Geology	5
PHY	127	Dscrp Astronomy	5

Social Science (SS)

HIS	299	Utah History	5
LE	122	Career Development	3
PSY	101	Gen Psychology	5
PSY	150	Hmn Grth & Dev	5

* An interdisciplinary course must be selected from outside of the student's major division.

Major Courses (Minimum 72 credits)
(See individual departments for specific requirements.)

Associate of Science Degree

(Minimum 96 Credit Hours Required)
The AS Degree will qualify as the first two years of a Baccalaureate degree and may also be used to satisfy the general education requirements in all four-year colleges and universities in the Utah System of Higher Education.

General Requirements (51 credits)

Core Academic Skills

CL	101	Bsc Cmptr Cpts	3
COM	110	Org & Intpl Com	3
ENG	101	English Composition	4
ENG	102	English Composition	4
MTH	105	College Algebra	5
PE		(any PE courses)	2

American Institutions

HIS	170	American Civ.	5
		or	
POLI	110	Am. Ntl. Gov.	5

General Education

Biological Science (BS) **(5)**

BIOL	101	General Biology	5
BIOL	105	Intro to Human Anatomy & Physiology	5
BIOL	120	Botany	5
BIOL	130	General Zoology	5

Humanities (HU) **(5)**

COM	101	Basic Communication	3
ENG	250	Intro to Literature	5
FA/HU	110	Art Appreciation	3
HU	102	Ancient to Renaiss	5
HU	103	Enlight - Mod Day	5
HU	111	Survey Art History	5
HU	112	Hist Modern Art	5
HU	241	Great Books	3
HU	242	Great Books	3

******Interdisciplinary Course (INT)* **(5)**

COM	150	Intro to Mass Com	5
HU	101	Intro to Humanities	5
HU	275	Philosophy in Lit	5
TECH	101	Tech and the Citizen	5

Physical Science (PS) **(5)**

CHEM	101	Intro to Chem	5
GEOL	101	Physical Geology	5
PHY	127	Dscrp Astronomy	5

Social Science (SS) **(5)**

HIS	299	Utah History	5
LE	122	Career Development	3
PSY	101	Gen Psychology	5
PSY	150	Hmn Grth & Dev	5

* An interdisciplinary course must be selected from outside of the student's major division.

Major Courses (Minimum of 45 credits)
(See individual departments for specific requirements.)

Associate of Arts Degree

(Minimum 96 Credit Hours Required)
The AA Degree is designed for those students wishing to transfer to a four-year institution in a liberal arts area. It will qualify as the first two years of a Baccalaureate degree and may also be used to satisfy the general education requirements in all four-year colleges and universities in the Utah System of Higher Education.

General Requirements (51 credits)

Core Academic Skills

CL	101	Bsc Comptr Cpts	3
COM	110	Org & Intpl Com	3
ENG	101	English Composition	4
ENG	102	English Composition	4
MTH	105	College Algebra	5
PE		(any PE courses)	2

American Institutions

HIS	170	American Civ.	5
		or	
POLI	110	Am. Ntl. Gov.	5

General Education

Biological Science (BS) **(5)**

BIOL	101	General Biology	5
BIOL	105	Intro to Human Anatomy & Physiology	5
BIOL	120	Botany	5
BIOL	130	General Zoology	5

Humanities (HU) **(5)**

COM	101	Basic Communication	3
ENG	250	Intro to Literature	5
FA/HU	110	Art Appreciation	3
HU	102	Ancient to Renaiss	5
HU	103	Enlight - Mod Day	5
HU	111	Survey Art History	5
HU	112	Hist Modern Art	5
HU	241	Great Books	3
HU	242	Great Books	3

******Interdisciplinary Course (INT)* **(5)**

COM	150	Intro to Mass Com	5
HU	101	Intro to Humanities	5
HU	275	Philosophy in Lit	5
TECH	101	Tech and the Citizen	5

Physical Science (PS) **(5)**

CHEM	101	Intro to Chem	5
GEOL	101	Physical Geology	5
PHY	127	Dscrp Astronomy	5

Social Science (SS) **(5)**

HIS	299	Utah History	5
LE	122	Career Development	3
PSY	101	Gen Psychology	5
PSY	150	Hmn Grth & Dev	5

* An interdisciplinary course must be selected from outside of the student's major division.

Major Courses (Minimum of 45 hours) including 15 consecutive hours of a foreign language. (See individual departments for specific requirement.)

Applying for Graduation

1. Complete an application for Graduation obtained from the Registrar's Office.
2. Pay the $10.00 graduation fee at the College Center information desk or Main Cashier. A separate application and fee is required for each certificate, diploma or degree sought.
3. Submit Application for Graduation to the Registrar's office at least one quarter before you intend to graduate and prior to the deadline published in the quarterly class schedule.

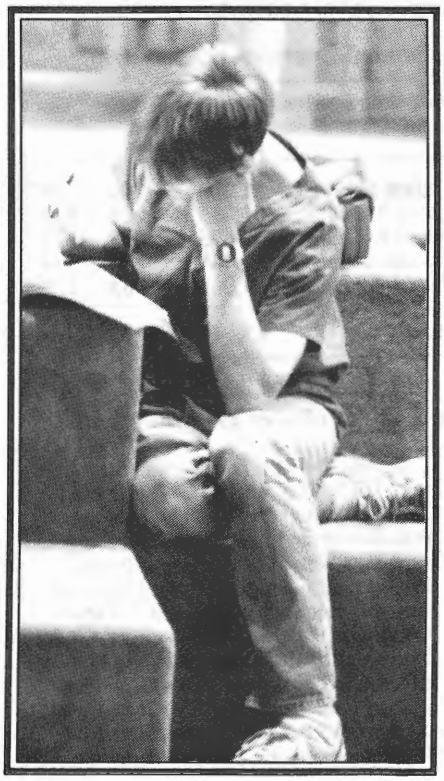
Graduation certificates are mailed six to eight weeks after the end of the quarter in which the student completes graduation requirements.

Academic Leniency Policy

For various reasons, some students find themselves in a position of being unable to graduate because their grade-point average is below the minimum required. Although students have the option of repeating classes in order to raise the grade-point average, there are certain situations where doing this would be impractical and/or would prove to be a hardship.

Failing grades will not be used in computing the grade-point average for graduation if a student selects a major, fails in that major, but subsequently completes all the requirements for a Diploma, Certificate, Associate of Applied Science Degree, Associate of Science Degree or Associate of Arts Degree in a different major.

Students should be aware that the Academic Leniency Policy is an internal policy only. The grades will not be removed from the transcript or changed in any way. Those who wish to use the Academic Leniency Policy should make written request to the Registrar's Office.



FINANCIAL AID

College Center, Second Level
967-4291

Financial Aid Budget

Level of Need = Budget - Resources

A student's financial need is the difference between the cost of attendance at SLCC and the expected family contribution to the cost of education. A number of federal, state and private sources of assistance are available to eligible students who demonstrate financial need. (Some scholarships and waivers based on merit and achievement are also available.) In receiving financial aid, students and their families are expected to assume some responsibility for meeting the cost of education. The expected contribution from the student and family is determined by income, assets, number of dependents, and other relevant information. Most financial assistance is awarded when costs of attending SLCC are greater than the ability to pay. To determine this, the College uses the guidelines established by the U. S. Department of Education.

To apply for financial aid, students must complete one of the federally approved applications for financial aid. There is a $7 charge for processing some of these applications. Skills Center students at the Riverside Campus may obtain information from the Financial Aid Office at that campus.

Estimate of Student Expenses

The following figures represent estimated minimum costs for a student attending SLCC for three quarters. These budgets are calculated to allow students to participate fully in the normal college life. The budgets are reviewed annually to reflect changes in education-related costs in the Salt Lake area. Examples of typical budgets are shown below.

Estimated Expenses (3 quarters)

Full-time Student	Living with parents	Not living with parents	Non-residents
Tuition & Fees	$1,200	$1,200	$3,300
Room & Board	1,635	4,065	4,065
Books & Supplies	675	675	675
Transportation	465	465	465
Personal Expense	1,065	1,065	1,065
Total	$ 5,040	$7,470	$9,570

Application Process

To apply for financial aid, students must:

1. Complete the Family Financial Statement (FFS) and send it to American College Testing (ACT). The FFS is available at the Financial Aid Office and most high school counseling offices.
2. Submit the Student Aid Report received from the processor to the SLCC Financial Aid office.
3. Complete the College Financial Aid Information Form and submit it to the SLCC Financial Aid Office. If you want to be considered for a Stafford (GSL) or Supplemental loan, you will need to complete an additional loan application available at the office.
4. Send Financial Aid Transcripts to any colleges that you have previously attended (this is required regardless of whether or not you previously received financial aid). Forms are available at the Financial Aid Office.
5. Submit further documentation if verification is required by the Financial Aid Office. This may include copies of income tax returns, proof of untaxed income, etc.
6. Complete the admissions process to become a matriculated student in an eligible program at SLCC. Entering students who need financial aid should check with Admissions, Academic Advising, or the Fnnancial Aid Office to make sure that they are enrolling in an eligible program.

Application Preference Dates

Once the student has completed an application for financial aid, it can take up to three months to be processed and notified of the results. The Financial Aid Office has established the following priority dates for students entering each quarter:

Fall Quarter, 1990:	July 1, 1990
Winter Quarter, 1991:	October 1, 1990
Spring Quarter, 1991:	January 1, 1991
Summer Quarter, 1991:	March 1, 1991

Last date to submit 90-91 Student Aid Report: June 1, 1991.

Priority consideration will be given to students who have completed applications by these deadlines. Applications submitted after the priority dates will be processed as time allows in the order received.

Only one application is necessary per school year.

Major Types of Financial Assistance

Grants

Grants are gifts of money which do not have to be repaid. Students must show a significant amount of financial need to qualify for grant programs, and must also maintain satisfactory academic process. The four major grants awarded by SLCC are described below.

1. Pell Grant

Available to: Undergraduate students with financial need.
Provided by: The Federal Government
Value: Ranges from $100 to $2,300 depending on degree of need and cost of education and congressional funding level.
Duration of Eligibility: Students who receive their first Pell Grant after July 1, 1987 are limited to five years of eligibility in a four year undergraduate program, or six years in an undergraduate program which normally takes five years to complete. Up to three quarters of necessary remedial courses may be taken without being counted toward the maximum time limit. This limitation may be waived under certain "undue hardship" circumstances; however, SLCC Pell Grant recipients planning to transfer to a four year institution to obtain a bachelor's degree need to keep that limitation in mind.

2. Supplemental Educational Opportunity Grant (SEOG)

Available to: Undergraduate students with financial need. Limited to those with highest need.
Provided by: The Federal Government
Value: Usual range is $100 to $800, dependent upon funds available and degree of need.

3. State Student Incentive Grant (SSIG)

Available to: Utah resident undergraduates demonstrating exceptional financial need.
Provided by: State and Federal Government
Value: $100 to $1,500, dependent upon fund availability and degree of need.

4. Utah Educationally Disadvantaged Grant (UEG)

Available to: Utah resident undergraduates who demonstrate exceptional financial need and are educationally disadvantaged.
Provided by: State of Utah
Value: Usual range is $100 to $800, dependent upon fund availability and degree of need demonstrated.

Loans

Federal (Title IV) loan programs assist students with their educational expenses now and are repaid when the student is no longer attending or enrolled at least half time. The College participates in four federal loan programs: the Perkins Loan (formerly called the National Direct Student Loan, or NDSL); the Stafford Student Loan (formerly Guaranteed Student Loan); Supplemental Loans for Students (SLS); and the PLUS program for parents of dependent students. In additions to these federal programs, SLCC provides a short term tuition loan program and a short term emergency loan fund.

1. Perkins Loan (formerly National Direct Student Loan - NDSL)

Available to: Students with demonstrated financial need.
Provided by: Federal Government
Value: Maximum of $4,500 while attending a two year college (even if the student attends more than two years). By school policy the maximum which usually can be borrowed at SLCC in one year is $1,500. Eligible students who transfer to obtain a bachelor's degree may receive an additional $4,500 once they have achieved third year status in a baccalaureate degree program.

Repayment: For "old borrowers" (those who obtained a Perkins or NDSL prior to July 1, 1987), repayment begins 6 months after leaving school or dropping below half time status. Under certain conditions, repayment may be deferred or partially or fully cancelled. The Financial Aid Office will supply details to all borrowers or other interested students. For "new borrowers" (those who obtained their first Perkins Loan after July 1, 1987), repayment begins 9 months after leaving school or dropping to less than half time status.

The minimum repayment is $30 per month and may be higher depending upon total amount borrowed. The maximum time allowed for repayment is 10 years, not counting periods of deferment. The interest rate on Perkins Loans is 5%. Perkins borrowers must have an annual loan counseling interview and an exit conference in order to receive these loans.

2. *Stafford Student Loan*

(formerly Guaranteed Student Loan)
Available to: Students with demonstrated financial need.
Provided by: Lending institutions, such as banks, credit unions or savings and loan institutions.
Value: For two year college students (no matter how many years they attend a two year college) the maximum which can be borrowed is $2,625 per year. The lifetime maximum which can be borrowed while seeking an undergraduate degree is $17,250. As a rule, loans must be disbursed in at least 2 checks.
Repayment: Begins six months after leaving school or dropping below half time. Under certain conditions, repayment may be deferred by the lender. The lending institution or the Financial Aid Office will supply details.

Minimum monthly payments are $50 per month and may be higher depending upon total amount borrowed. The maximum repayment period is ten years, not counting periods of deferment. The interest rate for Stafford Loans is paid by the government until the borrower leaves school or drops below half time. The rate is 8% for students who have an unpaid loan made prior to July 1, 1988. Borrowers whose first loan is made after July 1, 1988 will pay 8% interest for the first four years of the repayment period and 10% beginning with the fifth repayment year. Stafford borrowers must participate in a loan debt counseling session prior to receiving their checks and an exit conference each year. Under federal default management regulations, release of first disbursement checks to first time borrows at SLCC may not occur until after the 30th day of enrollment in the loan period. Tuition must be paid before Stafford checks can be released each quarter.

3. *Supplemental Loans for Students (SLS)*

Available to: Independent students whose cost of education exceed all financial aid received.
Students who have not earned a high school diploma or GED are not eligible for SLS.
Provided by: Lending institutions such as banks. NOTE: Lenders may require a credit check for prospective SLS borrowers.
Value: May not exceed cost of education less other aid. The maximum annual amount is $4,000. The lifetime limit for SLS is $20,000.
Repayment: Begins 60 days after disbursement. Full time students may apply for deferment of payments while in college, but interest will be charged to the student during deferment periods.

The interest rate on an SLS is variable, based on Treasury Bill rates, but currently may not exceed 12%. The government does not pay the interest on an SLS. At least two disbursements are required, as well as attendance at loan debt counseling prior to receiving loan proceeds and an exit conference each year. Tuition must be paid before Supplemental Loan checks can be released each quarter.

4. *PLUS Loans*

Available to: Parents of a dependent student.
Provided by: Lending institutions. NOTE: Lenders may require a credit check for prospective PLUS borrowers.
Value: May not exceed cost of education less other aid. The maximum annual amount is $4,000. The lifetime limit for SLS is $20,000.
Repayment: Begins 60 days after disbursement. Deferment may be granted while the parent or the dependent student are enrolled full time in college. The lender or Financial Aid Office can supply information on deferments.

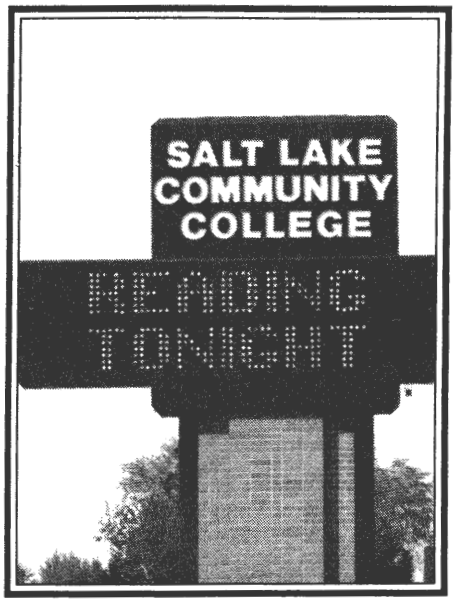
The interest rate on a PLUS is variable, based on Treasury Bill rates, but currently may not exceed 12%. The government does not pay the interest on PLUS.

5. *Short Term Tuition Loans- William T. Fairbourn Rotary fund*

Available to: Students who have completed at least 12 credit hours at SLCC and have a cumulative GPA of 2.0 or higher.
Provided by: A fund provided by the Murray Rotary Club in honor of Major General William T. Fairbourn.
Value: Limited to payment of tuition and fees up to a maximum of $400, and subject to fund availability. Repayment: These loans must be repaid by the end of the quarter in which they are made. A co-signer is required and a $10 service charge is added to the amount borrowed.

6. *Short Term Emergency Loans*

Available to: Students who have completed at least 12 credit hours at SLCC and have a cumulative GPA of 2.0 or higher.
Provided by: SLCC
Value: Maximum amount $50 to cover emergency expenses only. Repayment: An emergency loan must be repaid by the end of the quarter in which it is made. A $10 service charge is added to the repayment amount.



Part-Time Work

Most part-time student jobs are awarded through the federally funded College Work Study Program, which requires establishing financial need through the FFS. Work opportunities are scheduled around eligible students 'class schedules. Pay scales are based on hourly rates and may vary depending upon the job, but are at least minimum wage. Students are awarded a specific dollar amount and may work until total salary paid equals that amount. Most students work 10-20 hours per week.

There are also part-time jobs within the community that do not require establishing financial need. These are available through the SLCC Career Action Center.

Scholarships

Scholarships provided by the College or by private donors are awarded on the basis of superior achievement and promise of future excellence. Financial need is also a criterion for some scholarship awards. Policy for the selection of recipients is made by a committee composed of faculty, staff and student representatives, or may be established by the donor organization.

Tuition Waivers

SLCC maintains a tuition waiver program which waives tuition (but not fees) for eligible students enrolled full-time, 12 to a maximum of 15 hours, in a number of academic programs. Most waivers are granted for three quarters; Summer Quarter waivers require a separate application. Waivers are not transferable and may not be used for Continuing Education classes. A tuition waiver is credited to the student's tuition charges, and no cash disbursement is made. Types of tuition waivers are briefly described below.

Honors at Entrance

Available to: new students entering from Utah high schools. Applicants must have at least a 3.2 high school grade point average (GPA) to apply. Applications are available from, and must be submitted to, the SLCC Admissions Office. Application deadline is April 1.

Presidential Leadership

Awarded to new students who have been active in school and/or community activities. Students awarded a Presidential Leadership waiver will be required to be involved with SLCC student government activities during their freshman year. Applications are available through the Admissions Office and submission deadline is April 1.

Dean's Departmental (New Student)

For students who can demonstrate skill, experience, related coursework and motivation in the area of their anticipated major. Applications available through the Admissions Office; application deadline is April 1. Award decisions are made by the academic department in which the student plans to enroll.

Dean's Departmental (Continuing Students)
Granted by academic departments to continuing students, based on demonstrated skill, experience and motivation in the major area of study. Applications available through the Financial Aid Office; application deadline is July 1.

Continuing Student
Students must have at least a 3.5 GPA in order to apply. Waivers are granted starting with applicants with the highest GPA and then in descending GPA order until the dollar amount allotted to this waiver fund is exhausted. Application deadline is July 1. NOTE: Students should be aware that a 3.5 GPA is a prerequisite, but that average may not be high enough to be awarded this type of waiver.

Need-Based
Available to: students with exceptional circumstances of need. There is no application deadline, but these are subject to availability of waiver funds. Applications may be obtained at the Financial Aid Office.

Special Tuition Waivers

Some waivers are available through campus organizations which meet criteria for participation in campus, civic and community activities. Single parent/displaced homemaker students with demonstrated financial need may qualify for a "Special" waiver and should apply through the Single Parent/Displaced Homemaker Program Office in the College Center. Athletic waiver recipients are designated by the Athletic Department, from which applications should be obtained.

Non-Resident
Available to: outstanding non-Utah resident students. Applications considered throughout the year. This waiver covers the resident tuition amount only.

Summer Quarter Waivers
Available to continuing students with at least a 3.5 GPA for Summer Quarter only. Application deadline is May 1.

Private/State Scholarships

Private or State scholarships vary in availability from year to year. Special applications may be required and deadlines for submission vary. Students should contact the Financial Aid Office for information on other scholarship funds which may have been donated to the College. The following briefly describes some of the typical sources.

Utah Teaching Career Scholarship
State funded program providing funds for tuition and fees for students pursuing certification to teach in Utah.

Elks National Foundation Scholarship for Vocational Education Students
Awarded for students entering or currently in a vocational education program.

Scholarships for Blind Students
Available through both the Utah Council for the Blind and the National Federation of the Blind.

Sterling Scholarships
Tuition only waivers (fees not included) to Sterling Scholar Award recipients.

Governor's Vocational Scholarships
Tuition waivers awarded to winners of the Governor's Vocational Scholarship Program.

Jane Dooley Gile Nursing Scholarship
Awarded through the Nursing Department to nursing students. Interested students should contact the Nursing Department.

Professional Secretaries International SAL-UTE Chapter
Available to second year Office Administration students enrolled in AAS degree programs majoring in Information Processing Systems, Secretary or Office Management.

Eligibility Criteria for Financial Aid

To continue to receive financial aid or scholarships, a student must maintain the Standards of Satisfactory Progress established by federal and SLCC guidelines. Progress is measured against both qualitative and quantitative standards. The measurement of progress is summarized below:

1. A 2.0 cumulative and quarter GPA on required minimum number of hours:
   a. Full time student registers for and completes 12 or more credits each quarter.
   b. A 3/4 time student registers for and completes 9-11 credits each quarter.
   c. A 1/2 time student registers for and complete 6-8 credits each quarter.
   d. Credit hours in which a grade of "UW", "I", "AU" or "EX" is earned will not be counted toward the credit hour requirement.
   e. Completion of 75% or less of credit hours taken will necessitate a Financial Aid Contract even if cumulative and quarter GPA are above 2.0.
2. Students who fail to achieve the above standard will need to see a Financial Aid Counselor and sign a Financial Aid Contract. If terms of the contract are not met, the student's aid will be terminated. Students have the right to appeal an aid cancellation decision if they feel that mitigating circumstances should be considered. Appeals are reviewed by a committee composed of representatives from the Financial Aid Office and the Academic Advising Department.
3. As a rule, a maximum of 12 quarters of financial aid eligibility is allowed for all students.
4. Students may receive financial aid while taking remedial and preparatory classes (including Developmental Studies) for no more than 3 quarters, and must be enrolled in an eligible program while taking these courses. Students whose major is shown as Developmental Studies, or others entered as nonmatriculated, are not eligible for financial aid. This restriction is mandated by federal regulations.
5. Students receiving federal (Title IV) financial aid for the first time in 1987-88 or any period after that must have a cumulative 2.0 GPA at the end of two academic years, regardless of whether they were on aid during that period.
6. Credit hours transferred from another institution which count toward the student's degree or certificate requirements are subject to the limitations for aid eligibility described above. This requirement may be waived only in circumstances in which the student must take additional hours as a result of transferring from another institution.

Full details of the Satisfactory Progress Policy may be obtained from the Financial Aid Office.

Conditions Under Which Financial Aid May Be Withdrawn:

1. Failure to meet Satisfactory Progress Policy standards.
2. Failure to meet conditions of a Financial Aid Contract.
3. Misrepresentation or falsification of application materials for aid or for admission.
4. Official or unofficial withdrawal from the College.
5. Violation of any institutional policy or regulation which could result in suspension or termination from the College.

Financial Aid Refund Policy

The following formula will be used to determine the amount to be returned to Title IV accounts if a student withdraws from school or reduces credit hours below the minimum for which he or she was awarded.

$$\frac{\text{Refund X Total Amount Title IV Aid Received minus CWS Earnings}}{\text{Total Aid Received minus CWS Earnings}} = \text{Amount to be Returned to Title IV}$$

Priority for refund distribution of Title IV funds is Stafford, SLS, Perkins, SEOG, SSIG, Pell, other loans, grants. Any refund amount due on a Stafford or Supp;lemental Loan will be sent directly to the lending institution along with notification of the withdrawal or drop below 6 hours date. No refund to a Title IV account may be larger than the amount the student received from the account. If after distribution to Title IV accounts, a refund amount remains, distribution to other funding sources is done on a prorated basis.

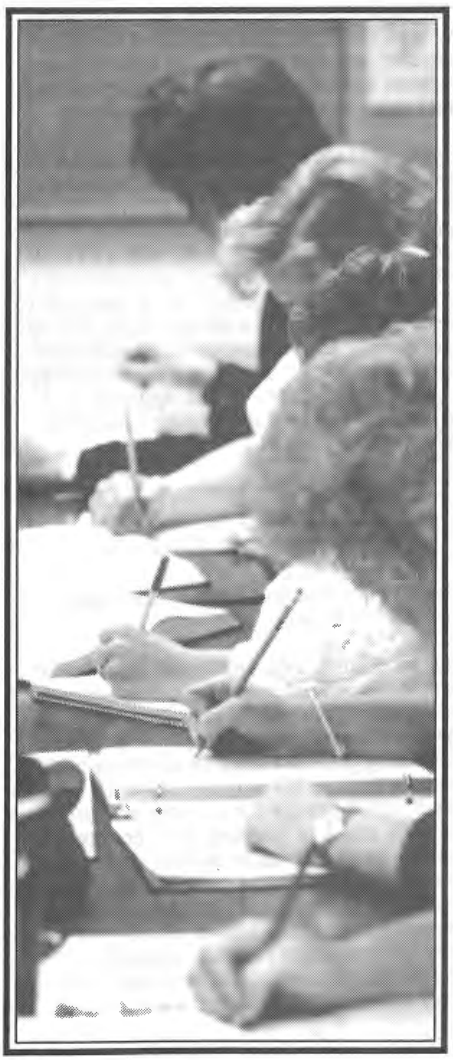
If after applying the above calculations, no further repayment of aid is due, the remainder of the refund will be given to the student.

Repayment Policy

If it is determined after refunds are considered that a student received financial aid in excess of his/her costs for the quarter, the student is required to repay the unused portion, unless the overpayment can be adjusted through revision of financial aid awards within the same award year. If this cannot be done, determination of the repayment amount due is calculated as follows:

1. Determine the last date of attendance.
2. Credit any tuition/fee refund as described in the preceding section.
3. Deduct from the remaining award amount for non-refundable costs of tuition/fees, books and supplies.
4. Pro-rate the repayment owed from the remaining award balance--number of weeks attended divided by number of weeks in a quarter. Priority for allocation of repayment is SEOG, Pell, SSIG, followed by loans.

☞ These policies are subject to review and revision, pursuant to College and federal procedures and regulations. Appropriate notice of such changes will be given, whenever possible, before they become effective.



CAREER AND ACADEMIC ADVISING

College Center, Second Level
967-4073

Academic Advising

Advisors are available to assist students with educational planning and academic advising. Advisors help students identify personal academic strengths and limitations and choose appropriate coursework that leads to success in the classroom.

If a student is undecided about a college major an advisor will explore school offerings with the student and suggest which programs will prepare the student for his or her career or job.

Academic Advisors for "undecided" or "undeclared" students on the Redwood Road campus are located in the College Center, room 230, on the second level.

Academic Advisors are also available in the School of Humanities and Science Education, Rampton Technology Building, room 216, and the School of Business and Technology, Business Building, room 132. These advisors provide specialized academic assistance to students enrolled in majors offered through these schools.

Students with Disabilities

Early registration is available every quarter to students with disabilities. To take advantage of this service, students must have documentation on file with the Advisor for Students with Disabilities, CC230M, phone 967-4529.

The Skills Center at the Riverside Campus offers additional training, programs and advisors/information technicians are available on that campus as well as the Redwood Road campus to assist students, CC 230C, 967-4097 or 967-4135.

Career Counseling

Career Counseling is available for students who wish to decide on a career after learning about themselves and how their self-information relates to the world-of-work. A counselor will facilitate the student in making accurate career decisions and developing achievable career plans. Career Counseling services are available on the second level in the College Center.

Career Information Center

The Career Information Center provides a number of options to explore the world-of-work. First, career assessment is provided to learn about one's interests, work values, personality type, etc. Second, written and audio/video materials are available providing extensive information about occupations. Third, DISCOVER, a computerized career planning and information program, developed by A.C.T., will help identify occupations that match a student's interests, values, and abilities and allow the student to gather specific information about each occupation listed.

The Career Information Center is part of a comprehensive career service provided for students and supports career counseling activities. The Career Information Center is located in the College Center, second level, room 230.

General Education Undeclared Emphasis AS

Students applying for admission to the college who are uncertain about their selection of a major may check Undeclared/Exploratory emphasis in General Education (AS) on the Admission Application.

Students who choose this option will work closely with a counselor in the Center for Career and Academic Advising to explore possible majors at SLCC and have up to two quarters to declare an approved program of study.

A student must declare a major at the end of the two quarters in order to continue financial aid assistance.

Assessment Center

The Assessment Center is where students learn about their academic strengths and abilities. This information is used in recommending appropriate course work to students. A placement test is used to identify basic skill levels in Math, Reading and Writing. Placement tests are also available for subject areas in Business Math and Algebra. English placement is determined by a writing sample which students must write prior to registering for any English composition class. There are published deadlines for each quarter, to which students must adhere in order to complete the English placement writing sample to register for the desired quarter.

The General Education Development (GED) test is available to assist students in obtaining a high school equivalency diploma (certain regulations apply; see the Assessment Center for details).

Also available is CLEP (College Level Examination Program) which allows students to obtain credit in general education areas such as humanities, English, science and social studies/history.

The CALT/EST Test is offered to international students for placement in ESL classes or regular college classes.

The Assessment Center is located in the southwest corner of the lower level of the College Center. Office hours and information may be obtained by calling 967-4269.

CENTER FOR BUSINESS AND ECONOMIC DEVELOPMENT

CBED Bldg., Northeast corner of campus, adjacent to Redwood Rd.
967-4014 or 967-4208

MISSION STATEMENT
The Center for Business and Economic Development is Salt Lake Community College's principal economic development arm. It provides the following services to business and industry: workshops, seminars, and conferences, custom fit training, computer-aided design (CAD) training, cooperative education, placement, productivity, and entrepreneurship training. The Center is designed to help SLCC respond rapidly to the changing needs of business and industry.

CAD Training Center Facility

For more information contact Gary Poulsen 967-4303
Salt Lake Community College's CAD Training Center complex is equipped with modern, state-of-the-art hardware and software. Housed in the Center's lab are 48 CAD workstations, 4 plotters, laser printer, and various other printers. The workstations include 30 386 PC's and 18 286 PC's using mice and digitizers. Software, such as AutoCAD, AutoSOLIDS, AutoSHADE, AEC Architectural and AEC Mechanical, is used to cover a range of applications from Solid Modeling to 2-D and 3-D drafting.

The Center's instructional areas use overhead projection systems, so that students can see and perform commands demonstrated as the instructor uses them on the computer. This method of instruction is extremely helpful to new students. Hands-on type training for small groups can also be done in this instructional area. Course descriptions are listed at the back of the catalog.

Career Action Center

For more information contact Jim Godfrey 967-4013
The College's Career Action Center is an amalgamation of three separate but closely related services - Cooperative Education, Placement, and Job Service. In addition, this organization supervises the Internship and Cooperative Honors programs. All professional staff members are fully qualified to serve students' job and career needs including part-time or temporary employment, cooperative education, internship, and full-time career employment.

Center for Entrepreneurship Training

For more information contact Sterling Francom 967-4558

The purpose of the Center for Entrepreneurship Training is to assist business owners in developing the necessary skills required to develop, maintain and expand their business. Workshops, seminars and short courses are offered on the following subjects: marketing, finance, production management, business plan development, business law, quality assurance processes, personnel and general management. All educational and training activities are coordinated with the School of Business and Technology.

Cooperative Education

For more information contact Pat Gardner 967-4115
Cooperative Education (CO-OP) is an educational process that formally integrates course work with paid study-related work experience in business, industry, and government. Using "learning objectives" established during each quarter of registration, the CO-OP student earns college credit to apply toward program completion requirements.

Because Cooperative Education course requirements are based primarily on regular periods of study-related work, and are individualized for each participating student, it is not possible to *audit* or *challenge* a Cooperative Education course.

Most CO-OP schedules require the student to attend classes on campus part of the day (either daytime or evening) and work part or full-time off campus. Some CO-OP employers require participating students to alternate full-time work quarters on the job and full-time study quarters on campus.

CO-OP student benefits include:

- A better understanding of relationships between education and the "world of work."
- More meaningful academic experiences through working with professionals in the field.
- Opportunities to work with equipment, facilities, and processes that cannot be duplicated in college classrooms or laboratories.
- Opportunities to "fine- tune" basic skills for heightened professional competence.
- Money to apply toward educational expenses.
- Opportunities to combine theory with practice for a better total education.
- The advantage of establishing a study-related work history, for inclusion in the resume, to make the student more attractive to prospective employers after graduation.
- Credit toward college degree or certificate.

Eligibility Requirements
Students pursuing an Associate Degree should normally have sophomore standing with an overall grade point average of at least 2.0, to participate in Cooperative Education. (Some exceptions can be made to the policy requiring sophomore standing, based upon previous college course work and other factors.) Students working toward a one-year certificate should have completed two quarters of the total program, with a 2.0 GPA prior to CO-OP participation.

Before registering in a CO-OP course for any given quarter, each student must be already employed in a study-related job and have the position approved by his/her Division Chair, a faculty member within his/her major department, or a CO-OP program staff member. Students who wish to participate in CO-OP, but are not working in a study-related position, should come to the CO-OP offices in the Center for Business and Economic Development at least a month prior to the beginning of the academic quarter, for assistance in finding an appropriate Cooperative Education job.

If the student plans a parallel CO-OP experience (working and attending classes concurrently), he or she should normally be working an average of about 20 hours per week and plan to carry at least a half-time academic load (including the CO-OP course). The student on a full-time alternating CO-OP plan (e.g., working in a CO-OP position with one of the federal agencies) must be employed at least 35 hours per week and is not required to take any courses other than the appropriate CO-OP course.

If you meet these requirements or expect to meet them within the next few months, come to the Center for Business and Economic Development, located in the northeast corner of the Redwood Road campus. Talk with a CO-OP program staff member to see if your current job qualifies for CO-OP credit or, if you aren't presently working in a study-related job, to start looking for an appropriate CO-OP position. A face-to-face interview is preferred; but, in some cases, a review and approval of an existing job can be done by telephoning 967-4115, 967-4304, or 967-4013.

Custom Training for Economic Growth

For more information contact Ben Mendoza 967-4185 or Rose Defa 967-4148

This program is non-credit and designed to provide customized employee training for new and expanding businesses, both large and small. The specific needs of each employer determine the training provided since flexibility in packaging the training is a program concept. Businesses which qualify for the program receive funds to assist in training new employees. Training programs can be offered on-site or at college training facilities, using the businesses' or college's instructional personnel. College personnel may also assist in identifying job skills for specific job positions and in developing specialized curricula to meet the requirements of individual businesses.

Internships

For more information call 967-4013
Internship opportunities are available to Salt Lake Community College students who are not far enough along in their academic programs to qualify for paid Cooperative Education positions.

At Salt Lake Community College, internships are defined as being the same as CO-OP positions except they are normally unpaid and usually involve only eight-to-twelve hours of study-related work per week.

In both CO-OP and Internship Programs, the participating student establishes learning objectives during each quarter of enrollment, is evaluated and graded on how well he or she achieves the objectives by the end of the quarter, and receives academic credit that applies toward degree or certificate requirements. To insure against exploitation, no student may be involved as an intern with the same employer for more than one quarter. If the student continues with the same employer beyond one quarter, the position must be reclassified to a paid Cooperative Education placement.

Job Service

For more information contact Sherrill Chapman 967-4040

Salt Lake Community College is unique in that it is the first college or university in Utah to pioneer a branch office of the Utah State Job Service on campus. As an integral part of the Career Action Center, the Job Service representatives, Sherrill Chapman and Ted Wherry, work very closely with Cooperative Education, Internship, and Placement programs.

Job Service at Salt Lake Community College receives job orders (both part-and full-time) regularly from numerous employers throughout the Salt Lake Area and elsewhere. Job listings are prepared daily and are posted at eight locations throughout the campus.

Placement

For more information contact Jim Godfrey 967-4013

The Salt Lake Community College Placement Office is also an integral part of the Career Action Center. In close cooperation with the Utah State Job Service representatives, the Placement Office seeks out information on employment opportunities of all kinds throughout the area, the state, the region, and the nation, and then makes that information available to students and graduates.

The Placement Office provides job referrals and listing of part- and full-time jobs. These jobs are delivered to appropriate instructional departments daily and are also posted daily at eight separate locations throughout the campus. A new emphasis in placement services is career counseling, a career library, and workshops on job-seeking skills for students and graduates

Short Term Intensive Training

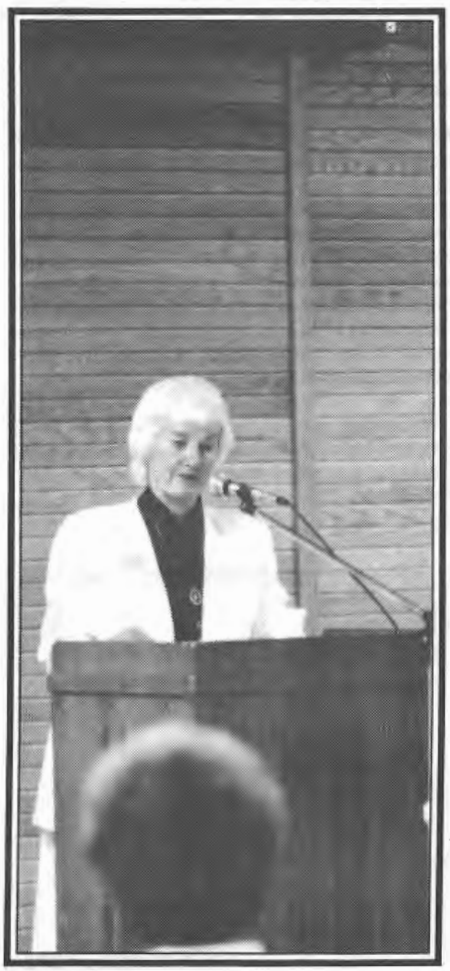
For more information contact Ben Mendoza 967-4185 or Rose Defa 967-4148

This program is designed to provide training for individuals seeking employment opportunities by matching them with companies that need specifically trained employees. The College will assist in identifying the training needs for businesses that have employment available at the conclusion of training. Training programs can be offered on-site or at College instructional facilities, using the businesses' or the College's instructional personnel. Programs are short-term, intensive (less than one year) and usually non-credit.

Workshops, Seminars, and Conferences

For more information contact Jo Rieber 967-4324

The purpose of this organization is to facilitate the conferencing and training needs of business, industry, and government through use of the resources and expertise of college personnel. Programs of high community interest are also designed for attendance by the public, bringing together experts and students who share a common interest.



SPECIAL SERVICES STUDENT SERVICES

Alcohol and Drug Education and Prevention

College Center, Second Level, 967-4268

The Alcohol and Drug Education program provides education, consultation, and referral services with informative and timely information about alcohol and drugs to the members of the campus community. The purpose of the program is to promote activities on campus and the surrounding community that inform students, staff and faculty of the effects and consequences of substance use. Activities include workshops, speakers bureau, educational courses, support groups and the BACCHUS Club.

The Peer Support Team is a group of students who are trained to assist fellow students with the difficulties of college life and present educational information to student groups and others in the community. Students who are interested in being a member of the Peer Support Team should contact the program director. The program also provides referral help to students who are abusing substances.

Child Care Center

4600 South Redwood Road, 967-9366

The Eccles Child Care Center (Redwood Road campus) provides care licensed by the State Division of Family Services for children of SLCC students while these students attend classes. Fees are set according to State standards. The center offers a preschool program that meets the intellectual, physical, social and emotional needs of developing children, and provides participation opportunities for parents. The center is open from 7:00 a.m. to 5:00 p.m. Not available at Riverside or Sandy Campuses.

Student Support Services

College Center, Second Level, 967-4089

Student Support Services is a federally funded equal opportunity program to enable students to succeed in college and complete their educational goals. Services are limited to 175 students who have a low income, or are first generation in college or who have a physical or diagnosed learning disability. To become eligible, students must first complete an application in the Student Support Services office and meet with a counselor. The following services are provided:

- Instructional and personal **counseling**;
- Group and individual **tutoring**;
- **Information** and **referral**;
- **Help** in obtaining all possible financial aid;
- **Coordination** with community resources;
- **Study Skills** and time management assistance;
- Assistance with **early registration** as needed.

Turning Point Program for Single Parents/Displaced Homemakers

College Center, Second Level, 967-4329

The Turning Point program for Single Parent/ Displaced Homemakers assists eligible participants in finding vocational training and placement in order to become self-sufficient. This project is funded through state and federal grants and serves individuals in the Wasatch Front South Region.

Single parents, homemakers, and displaced homemakers are offered a variety of services including referrals regarding different types of training, community resources, and limited financial aid.

Veterans' Eligibility

College Center, Second Level, 967-4289

Salt Lake Community College is an approved educational institution for veterans and other eligible persons who qualify for GI Bill benefits. There are several programs of benefits available and students should contact the campus VA Office to determine their eligibility. The campus VA Office answers questions about GI benefits, gives educational counseling, and acts as the certifying office.

In order to remain eligible for benefits, a veteran must choose a course of study and then take only those courses that fulfill the requirements for graduation. VA will not pay for courses that are audited, challenged or repeated. However, VA will pay again for a class in which an "E" grade is received if that class is required for normal progression or graduation. If an "I" or "EX" grade is received in a class, VA will not pay for that class a second time.

Veterans are required to attend and make satisfactory progress to remain eligible for VA benefits. Students are required to verify attendance and progress with the campus VA Office each quarter. A grade point average of less than 2.0 for two consecutive quarters can suspend benefits until the reasons for the unsatisfactory progress are resolved.

Students using GI Bill benefits should verify their enrollment each quarter with the campus VA Office. Any changes or interruptions in enrollment should be reported to the VA Office immediately.

STUDENT LIFE

Athletics

Athletic Complex 967-4083

SLCC Intercollegiate Athletics is a member of the National Junior College Athletic Association (NJCAA)-Region XVIII. Region XVIII is called the Scenic West Athletic Conference and includes Dixie, Snow, Eastern Utah, Colorado Northwestern, Ricks, South Idaho, North Idaho, Treasure Valley, and Utah Valley.

The SLCC Athletics program sponsors men's and women's basketball and they compete in the Scenic West Athletic Conference. The men's team has just completed their fourth successful season; the women their third.

Future plans are to expand the athletic sports offerings at SLCC to include softball, baseball, volleyball, etc. These sports would compete in Region XVIII's Intermountain Collegiate Athletic Conference (ICAC) which includes Dixie, Snow, Eastern Utah, Utah Valley, Colorado Northwestern, and Ricks.

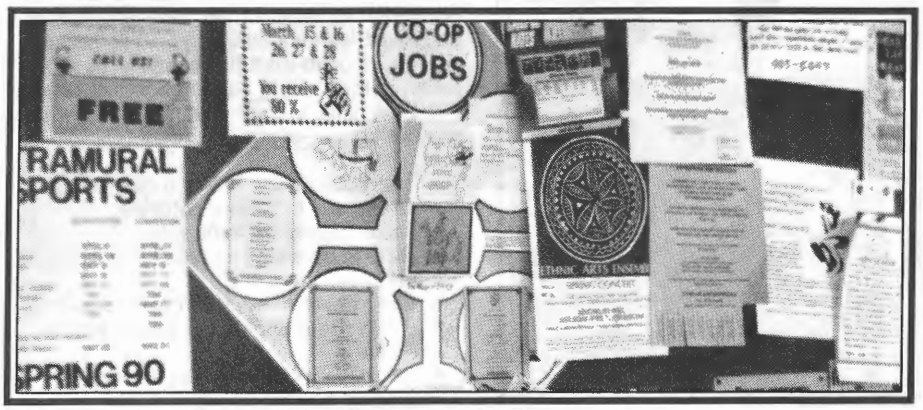
College Cashier

College Center, Lower Level, 967-4217

The Main College Cashier office is located in the southeast section of the college center lower level. Payments for tuition, fees, tickets for Community Arts Center productions, day care, and most other charges are accepted at the cashier windows.

All students registering for classes or making class changes are required to report to the Cashier to have tuition payments or credits processed. These payments or credits include authorizations sent to the college by various sponsors, VA authorizations, and financial aid recipients. Students who need to pick up financial aid reimbursement checks or financial aid loan checks (*NDSL, Stafford, SLS, etc.) must report to the cashier office, with positive picture identification, to do so.

The Cashier is open weekdays between 8:15 a.m. and 4:30 p.m., except regularly scheduled holidays. Extended hours are provided during rush times. These hours are posted at the cashier office.



College Center

The College Center is the social, cultural and recreational center for Salt Lake Community College students, faculty, staff, alumni and guests. Having recently finished a $6,500,000 remodel and addition project, the College Center creates a welcome atmosphere for students as well as visitors.

The main level houses the College Center Administrative Offices, the Student Activities Office, the College Store, Food Service and other Auxiliary Operations, lounges, a Courtesy Desk, cafeteria and dining areas, student lockers, an automatic teller machine, vending machines and a copy machine.

The newly completed second level has offices for Student Services, Admissions, Academic Advising, Financial Aid, Registration, Veteran Affairs, Drug and Alcohol Awareness, Student Support Services, Single Parent/Displaced Homemaker, and Students with Disabilities programs. New student study lounges, meeting facilities and Food Services Office are also located on this floor.

The lower level contains the Games Room, Computer lab, Sign Shop, Collections, Cashier, Health Center and additional meeting facilities and services. Reservations for meeting rooms and other requests should be made in advance in the College Center Administrative Offices. The college is governed by a campus-based College Center Board.

College Health Center

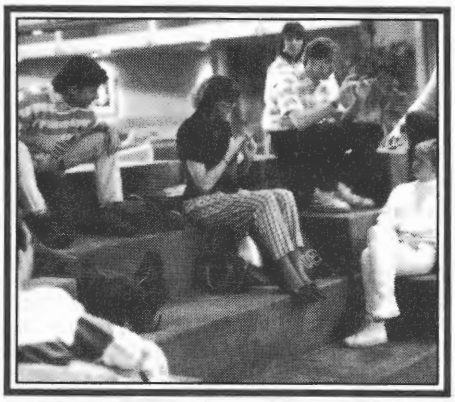
College Center, Lower Level, 967-4347

SLCC has established a limited Health Center Service to help improve the quality of student life on campus. The Center is staffed by a nurse practitioner who is available on a daily basis. The hours of service are posted at the center. Partial listing of the services offered are blood pressure and weight checking, physicals, health screening and limited treatment of minor injuries. The nurse practitioner will refer patients to other health providers as needed.

College Store

College Center, Main Level , 967-4045

The College Store carries the required books, tools, and supplies needed to complete an educational program. Many other items such as paperback books, calculators, computer supplies, logo imprinted sweat shirts and jackets and other miscellaneous items for student use. The cost of the books, tools and supplies vary with each course. The list of required items are available in each school and department offices. The College Store hours are posted at the entrance.



Copy Center
Administration Building, Rm. 187, 967-4157

The Copy Center is located in the southeast corner of the Administration Building. Black and white, single-color, or full-color copies are available from 8:00 a.m. until 8:00 p.m. Monday through Thursday and from 8:00 a.m. until 4:30 p.m. on Friday. Coin operated machines are available in the Library (TB), AD 187, BB foyer, CT foyer, CC outside the bookstore and the Sandy Campus student lounge.

Food Services
College Center, Main Level, 967-4060

Food Service is available, primarily in the College Center, for students, faculty, staff and guests. The food service operation provides beverages, snacks, sandwiches, grill service, salads, Mexican food and hot entrees at very reasonable prices. The cafeteria eating area has smoking and non-smoking areas. Vending machine areas are also located in each campus building.

The College Center Oak Room Buffet is open Saturday evenings during the academic year primarily for the campus community.

Additional Food Services are provided at the Riverside campus. The Riverside Campus cafeteria is open Monday through Friday from 7:00 a.m. to 1:30 p.m. Vending machines in the cafeteria are available during all hours the building is open.

Housing
Students moving to Salt Lake City to attend Salt Lake Community College should make advance arrangements for housing. The College does not have on-campus housing, and while the staff in Student Services may assist in locating housing, they cannot assume responsibility for securing facilities.

Intramural Sports/ Campus Recreation
Athletic Complex, 967-4078

A variety of recreational opportunities are provided for students, faculty, and staff of Salt Lake Community College including individual and team sports and outdoor excursions. The Campus Recreation office is located in the Athletics Complex.

Library
Rampton Technology Building, Main Level
967-4195

The library hours are 7:00 a.m. to 10:00 p.m. Monday through Thursday;Friday 7:00 a.m. to 8:00 p.m. The summer schedule will vary. The library is not open on weekends.

The collection contains more than 35,000 volumes and over 540 current periodicals. The books are devoted basically to technology; however, the library contains a small literature collection, paperback collection, and study area. The Salt Lake Community College identification card is needed to check out materials. The library is a member of the Utah College Council, enabling students and faculty to check out books from any college library in Utah, but a current validated Salt Lake Community College ID card is needed.

Media Center
Rampton Technology Building, Second Level
967-4199

Students may come to the media area to view videotapes or listen to an audio cassette or watch a slide program. There are typewriters, study carrels, and a coin operated copy machine available. The Media Center is open the same hours as the library.

Parking Services
Administration Building, Room 150D
967-4270

All students must register their motor vehicle(s) as they register. There is a fee for registration and a structure of fines for all on-campus vehicle violations. A complete set of rules governing traffic, parking and vehicle registration may be secured at the time of registration; or from the Security Office in the Administration Building, or Admissions Office. Each student should become familiar with these regulations upon registering. In addition, a visitors lot is provided to the north of the College Center. Although provided primarily for campus visitors, anyone willing to pay may park in this lot. Purchase of a parking permit does not include free parking privileges in this lot.

Salt Lake Community Arts Center
South City Campus. 967-4509

The Salt Lake Community Arts Center provides Salt Lake Community College and Salt Lake Valley residents with a new entertainment center, to be housed on the South City Campus. Six locally staged theatrical productions will be presented in the 1,700 seat theater/ auditorium during the year. These productions are intended to provide maximum performance opportunities for students, staff and community members as well as to offer high caliber stage presentations in a college environment at a reasonable cost to theater patrons. As the center develops it is anticipated there will be additional cultural opportunities and activities.

Student Accident Insurance
College Center Admin. Offices, Main Level
967-4075

The Student Accident Insurance fee provides limited coverage up to $15,000 for accidental injury to students while attending class or participating in school activities. The student is covered while traveling directly between home and the campus and/or activity. Accident insurance forms are available from each Division, the College Center Courtesy Desk or College Center Administrative offices.

Student Activities
College Center, Main Level, 967-4015

Recognizing the value of co-curricular activities to the growth of students, the College encourages active participation in the many activity opportunities available on campus. Through participation, students can achieve leadership skills and a perspective of values which help prepare for the challenges of a career and an active rewarding life. Activities on campus include: dinner theater, dinner dance, children's Christmas and Easter parties, Turkey shoot, river runs, symphony tickets, Awards Banquet, concerts, lectures, games, tournaments, and student elections.

Student Association
College Center, Main Level, 967-4015

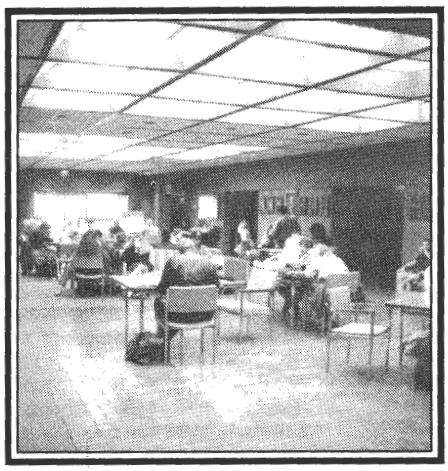
All students who have registered and who have paid the required activity fees are members of the Salt Lake Community College Student Association (SLCCSA). Students are represented by elected student officers and are represented on many College Committees and Boards. There are many opportunities for students to become involved in a wide variety of activities. Students are appointed to Student Senator positions and Activities Chairperson positions. The academic year includes a student newspaper, published weekly during the academic year.

Applications to become involved in Student Association and activities are available in the Student Activities Office in the College Center.

Student Grievance Procedure

In pursuing an education and attending College sponsored activities, the student should be free of unfair and improper action by any member of the College community. A grievance is a claim or charge of injustice, oppression, or discrimination affecting the welfare or conditions of a student or group of students. Any student who feels that he or she has been denied rights by any member of the College community can file a grievance action which is treated less formally than in a court of law. The purpose of a grievance hearing is to seek a workable solution to the problem without putting anyone on trial. Copies of the Student Grievance Procedure are available in the Vice President for Student Services Office.

The College Compliance Officer for the 1973 Rehabilitation Act (Section 504 dealing with handicap access to programs and facilities) is the Director of Personnel Services/EELS whose office is in the Administration Building.



Student Health Insurance

A Student Health Insurance Program is offered to students attending Salt Lake Community College as a courtesy. The college does not have any responsibility with the insurance carrier. Brochures and information are available in the College Center offices and at the courtesy desk.

Student Organizations

College Center, Student Activities, Main Level
967-4015

The quality of the educational process can be enhanced through participation in the student organizations. Several active organizations include political, service, religious, athletic, social, honorary, special academic and ethnic groups. Students interested in joining or forming a student organization should contact the Student Activities Office. Campus organizations include: Alcoholics/Narcotics Anonymous, BACCHUS (Students committed to responsible choice-making concerning alcohol and drugs), Barrier Busters (students united to make SLCC a barrier free campus), Biological Science Honor Society, Campus Crusade for Christ, Chefs Apprenticeship, Circle K, Delta Epsilon Chi, Delta Nu Alpha, Electronics Association, French Club, Indian Club, Instrument Society of America, Latter Day Saints Student Association, Legal Student Association, Literary Club, National Association of Accountants, Phi Beta Lambda, SACT (Student Association of Construction Trades), Ski Club, SLCC Dance Club, Spanish Club, Student Nurses Alliance, Toastmasters International, Veterans' Club, and Vocational Industrial Clubs of America.

Student Responsibility

It is the student's responsibility to read and understand current rules, regulations, fees, and requirements. The information in this catalog, courses offered and College requirements, may change at any time. These changes may be because of budget restraints, external requirements placed on Salt Lake Community College or other reasons. Salt Lake Community College is not bound by requirements or regulations listed in this catalog. Information may change before a new catalog is issued, and students must adhere to changes.

Student Social Standards

Salt Lake Community College extends the privilege of attending school to those persons who meet entrance requirements, standards of health, character, and prior appropriate conduct. The student enters college by choice and is not required by law to attend. Students are subject to federal, state and local laws as well as College rules and regulations, and are not entitled to immunity or privileges before the law. Maintenance of appropriate standards of campus "good citizenship" is expected. Students found guilty of violations of College rules and regulations are subject to such disciplinary action as the College may consider appropriate.

Salt Lake Community College recognizes that the use and abuse of alcohol and other drugs interferes with a student's educational goals. Because of this philosophy SLCC has very stringent rules governing the use of alcohol and other drugs on a campus or at SLCC sponsored activities.

Possession or distribution of alcohol, marijuana, LSD, narcotics or other drugs on College-owned property except as expressly permitted by law, will not be tolerated. The use of these substances at College-sponsored functions off campus is also prohibited. Any violation of this rule will result in disciplinary action. Smoking is prohibited in all buildings on the campus except in designated areas.

Salt Lake Community College recognizes the right of individuals to select their own apparel. Appropriate dress is characterized by cleanliness and neatness. Students should recognize the satisfaction of being properly dressed for each occasion. In the shop or laboratory, dress should conform with licensing requirements, and/or industry standards for safety and appearance. In some programs a specific laboratory uniform may be required. Clothing or hair styles that can be hazardous to students in training should not be worn.

Salt Lake Community College has established a Student Code - A Statement of Rights and Responsibilities. Copies are available from the Vice President of Student Service Offices.

SKILLS CENTER

Locations
1040 West 700 South, 328-5500
and Redwood Road Campus,
College Center, Room 230C
967-4097

Mission Statement
The Salt Lake Skills Center provides short-term vocational training and represents the State's commitment to provide quality vocational education to all levels of society in order to meet the needs of people who are educationally, socially, or economically disadvantaged and to those with handicaps, who meet the basic criteria for training.

The goal of the Skills Center is to train students with entry level vocational skills leading to job placement assistance. To that end, programs are designed as hands-on, open-entry/open-exit and students are encouraged to work at their own pace.

Skills Center Programs
Students are admitted to Skills Center classes on a weekly or modular-entry basis. New student orientation is held on Monday and class work begins on Tuesday. Classes are self-paced which allow students to learn at their own speed. Persons who want to enter a Skills Center program must apply at the Admission Office at the Riverside Campus or the Admission Office at the Redwood Road Campus, College Center, Room 230C, between 8 a.m. and 4 p.m., Monday through Friday.

Skills Center Program Offerings:

Open Entry
Adult Basic Education
Back-to-Work
Child Care
Computer Learning Center
Computer/Office Occupations
Electronic Assembly
Electronics Mechanic
English-as-a-Second Language
Job Club
Medical Records Specialist
Nurse Assistant
Production Machinist
Professional Driving
Welding

Limited Enrollment
Computer Programming Training for Persons with Severe Disabilities

Modular Open Entry
Automotive Mechanic
Building Construction
Heavy Duty Mechanics
Small Engine Repair

Programs are listed under the divisions that supervise them.

Additional Programs
Skills Center training programs are constantly updated and new programs are developed to meet employment needs of the community, with a strong emphasis placed on vocational training for success in today's job market.

Registration & Orientation
Skills Center registration for entry-level skills training leading to job placement assistance requires a non-refundable $25 application fee. This covers application, admissions, counseling, assessment tests, program selection, and new student orientation. A student may re-enter a Skills Center program within one calendar year at no charge.

Open-entry/modular registration not leading toward a degree, diploma or certificate of graduation or Skills Center job placement assistance, requires a $5 application fee.

Assessment
The Assessment Center at the Riverside Campus assists individuals in making realistic career decisions based upon assessment of: academic skills, vocational interest, work values, vocational aptitude, physical dexterities, occupational and labor market information and vocational counseling.

The results of this service provide the student with the information needed to make the best possible vocational and educational decisions.

As a Regional Assessment Center, its aim is to achieve two goals. The first is to help individuals in the community find an area of education and/or training that will fill their needs and meet individual values. The second goal is to provide business and industry with a source of workers who will find satisfaction in their work and stay on the job. As part of this goal, the Assessment Center cooperates with business and industry in the Wasatch Front Area to help them find workers that match job skills and interests with available jobs.

Tuition and Fees
Book deposits, tool, lab and registration fees must be paid before a student is enrolled. The tuition rate is $2.10 per scheduled hour for enrollment in occupational training areas. Minimum enrollment is one month of full time (120 hours) or part time (64 hours). Tuition is due on or before the first day of each month.

Students with tuition sponsored by a community agency, need an authorization form from the agency prior to assessment or enrollment.

Refunds
Due to the nature of Skills Center open-entry training programs, the unused portion of tuition will be refunded only under the following circumstances:

1. When a new student officially withdraws in writing through the instructional counselor within the first five calendar days following Orientation. Students will be charged for scheduled hours up to the date of formal withdrawal.

2. When a student is forced to withdraw due to an extreme medical emergency documented by a physician.

3. Due to the expense involved in the operation of the Professional Driving program, refunds are as follows:

Refund Period

First five scheduled class days	75%
Sixth through tenth class days	25%
Eleventh day and beyond	no refund

Financial Aid
The Skills Center assists students who have financial needs. A number of federal and state sources of assistance are available to eligible students. In receiving financial aid, students and their families are expected to assume some responsibility for meeting the cost of education. The expected contribution from student and family is determined by income, assets, number of dependents, and other relevant information. Most financial assistance is awarded when the cost of attending SLCC is greater than resources available. Financial aid is awarded only to students who maintain satisfactory progress and attendance in eligible programs.

To apply for financial aid, students must complete the application for federal financial aid (ACT application preferred) and mail it to the processor, and complete the Skills Center Financial Aid Information Form. Financial Aid Transcripts are required from every other college or post-secondary vocational training institutions ever attended, even if no financial aid was received from the other schools.

Additional information is available from the Financial Aid Officer at the Riverside Campus.

Standards of Attendance and Satisfactory Progress

1. Minimum acceptable level of attendance is 80 percent.
2. Non-attendance, for reasons such as illness, hospitalization or a death of a family member must be documented with the instructional counselor.
3. Students may be released by instructor for job interviews.
4. Students must maintain satisfactory progress in developing skills required, as documented by instructors.
5. Excessive tardiness may result in terminntion from the program.

High School and College Credit
Students can earn elective high school credits from their local school district through the Project Cooperation program. College credit is available for certain programs.

Project Cooperation Program
Project Cooperation offers non-high school graduates, seventeen or older, vocational training that will prepare the student for entry-level jobs. Students must have written permission from the school district vocational coordinator or high school counselor to participate.

Withdrawal From School
Withdrawal from an open-entry program, either before or upon completion, must be indicated in writing by the student through the instructional counselor.

ACADEMIC PROGRAMS

The Salt Lake Community College is divided into four different schools: *School of Business and Technology, School of Continuing and Community Education, School of Humanities and Sciences and School of Occupational Education.* These schools emphasize and offer programs leading to certificates and degrees in many different areas.

Certificate of Completion: Recognizes the completion of requirements in short-course, open-entry/open-exit, 8-week, 12-week programs. *See page 10*

One Year Certificate: Awarded after satisfactory completion of a minimum of 48 quarter credit hours in a prescribed course of study. *See page 10*

Diploma: Awarded after satisfactory completion of a minimum of 96 quarter credit hours in a prescribed course of study. *See page 10*

Associate of Applied Science Degree: Awarded after satisfactory completion of a minimum of 96 quarter credit hours (a minimum of 24 from General Education and Core Academic Skills courses, and up to 72 from selected major). This degree is not transferable to a four-year institution. Students desiring to transfer to four-year colleges, should take programs leading to an Associate of Science or Associate of Arts degree. *See page 10*

Associate of Science Degree: Granted after completion of a minimum of 96 quarter hours (51 from General Education and Core Academic Skills courses, and 45 from selected major) This degree will qualify as the first two years of a Baccalaureate degree and may also be used to satisfy the general education requirements at four-year colleges. *See page 11*

Associate of Arts Degree: Granted after completion of a minimum of 96 quarter hours (51 from General Education and Core Academic Skills courses, and 45 from selected major - including 15 consecutive hours in a foreign language.) This degree is designed for those students wishing to transfer to a four-year institution in a liberal arts area. It will qualify as the first two years of a Baccalaureate degree and may also be used to satisfy the general education requirements at four-year colleges. *See page 11*

In order for completion of programs to be accomplished in the most efficient manner, students are encouraged to contact the academic advisor, division chairs and/or faculty advisors early and regularly in their courses of study. Since many of the programs have formal application processes and prerequisite courses and/or skills, close contact and communication with these people are vital. Graduation requirements for these programs are subject to change. Students should check with their department concerning possible changes.

Students may earn credit through cooperative education in lieu of some of the laboratory classes for completion of graduation requirements. If the laboratory learning objectives are completed on the job, they may be validated through on-site visits by the instructor/coordinator and/or testing. For more information on Cooperative Education, see the general information section of the catalog and/or visit the Center for Business and Economic Development.

SCHOOL OF BUSINESS AND TECHNOLOGY

Dean, Dr. Michael M. Homer
Business Building, Room 109
967-4320

The School of Business and Technology exists to provide men and women with the skills needed to obtain successful employment and subsequent learning skills related to specific program areas. Student achievement of these skills can be applied with employers in making productive contributions to tasks in business and/or become the basis for continued learning at institutions of higher education. Because business practices and technologies are rapidly changing, program curricula are continually being upgraded to reflect current practices, concepts and skills. The School maintains a close relationship with industries, managers, technicians, and suppliers through advisory committees. These committees help maintain quality instructional programs relating directly to the current needs created by accelerating technological development. Students must be prepared for changes and should develop a positive attitude toward continued education and growth to be successful in chosen careers and employment.

DIVISION OF BUSINESS SYSTEMS

Division Chair - Boyd Warnick
Business Building, Room 105 A 967-4325

Pg. #		Cert. Comp.	1 Yr. Cert.	Dpl.	AAS Dgr.	AS Dgr.	AA Dgr.
25	Accounting		x		x	x	
44	Business Management		x		x	x	
74	Finance and Credit		x		x	x	
96	Marketing Management		x		x	x	
117	Production Management		x		x	x	
137	Transportation Mgt.		x		x	x	

DIVISION OF TECHNOLOGY

Division Chair - Wayne Crossen
Metal Trades Building, Room 228 A 967-4098

Pg. #		Cert. Comp.	1 Yr. Cert.	Dpl.	AAS Dgr.	AS Dgr.	AA Dgr.
31	Automated Sys. Tech.				x		
47	Comp. Aided Drafting and Design		x		x		
49	Comp. Information Sys.				x	x	
	Personal Computer		x				
63	Elect. Assembly/ Mech.	x					
65	Electronic Technology				x	x	
	Avionics Track.				x		
94	Manufacturing Tech.				x	x	
	Machining Tech.		x				
	Production Machinist	x					

SCHOOL OF CONTINUING AND COMMUNITY EDUCATION

Dean, Geoffrey Brugger
Construction Trades Building, Room 250 967-4137

In the past few years, the demand for class offerings has grown tremendously at Salt Lake Community College. More and more, business and industry are requesting classes in technical and related education to enhance existing training programs or to provide for a special training need. In addition, workshops, seminars and a variety of other activities are presented as a special service to the community. This allows the use of college labs, shops and technical expertise to meet the diverse requirements of our rapidly growing job and labor market.

The College has the flexibility to offer special instruction as needs arise and as it is requested by employers, individuals and community groups. The design and teaching of these programs is frequently a joint effort between the College and these groups and organizations. These activities may be offered on campus or at the job site.

DIVISION OF COMMUNITY EDUCATION

Division Chair - John Anjewierden
Business Building, Room 230 967-4327

Pg. #		Cert. Comp.	1 Yr. Cert.	Dpl.	AAS Dgr.	AS Dgr.	AA Dgr.
125	Adult Basic Education						
125	Computer Learning Ctr.						
54	Customer Service Tech.		x				
57	Developmental Studies						
68	Eng.-as-a-Second-Lang.						

DIVISION OF CONTINUING EDUCATION

Division Chair - George VanDeWater
Construction Trades Building Room 254 967-4201

Pg. #		Cert. Comp.	1 Yr. Cert.	Dpl.	AAS Dgr.	AS Dgr.	AA Dgr.
52	Concrete Technology		x				
55	Data Entry	x					
67	Employment Spec.	x					
71	Ethnic Min.Health & Human Services					x	x
73	Fashion Design Merchandising	x					
77	Flight Technology	x				x	
82	Hazaradous Material Tech	x			x*		
85	Horticulture Training	x					
86	Interior Design	x					
88	Law Enforcement	x					
90	Legal Assistant		x				
91	Legal Secretary	x					
91	Lifeguard/Swim Instructor Training	x					
77	Music						
101	Nondestructive Testing Technician	x			x*		
120	Real Estate	x					
122	Refrigeration, Heating, AC	x					
123	ROTC Supported Employment	x					
135	Surveying				x		
136	Theatre Arts						
139	Travel Training	x					

* Programs in process of development and review

CENTER FOR BUSINESS AND ECONOMIC DEVELOPMENT

Director - Rand Johnson
EDC 130 967-4215

The Center is Salt Lake Community College's principle economic development arm. It is designed to help SLCC respond rapidly to the changing needs of business and industry and provide the following important services to SLCC students.

Pg. #	
16	Career Action Center - Jim Godfrey (967-4013)
16	Cooperative Education - Pat Gardner (967-4115)
16	Custom Training for Economic Growth and
17	Short Term Intensive Training - Ben Mendoza (967-4185) or Rose Defa (967-4148)
17	Placement - Jim Godfrey (967-4013)
16	Training Center for CAD Systems - Gary Poulsen (967-4303)
17	Workshops, Seminars, and Conferences - Jo Rieber (967-4324)
16	Center for Entrepreneurship Training - Sterling Francom (967-4558)

SCHOOL OF HUMANITIES AND SCIENCES

Dean, Dr. John Duran
Technology Building Room 216E
967--4180

The School of Humanities and Sciences seeks to assist students to prepare themselves for a rapidly changing society where career and educational objectives must necessarily be flexible and dynamic. The school encourages and fosters the philosophy of education and career growth as lifelong endeavors.

Courses in general and related education are offered to give students in all Schools of the College a broad knowledge and appreciation of English, humanities, biology, mathematics, physical science, physical education, social science and languages.

Under the leadership of the School of Humanities and Sciences, child care services are offered to students of the College. See the General Information section of the catalog for specific information regarding the Child Care Center.

DIVISION OF HEALTH AND HUMAN SERVICES

Division Chair - Karen Lundberg
Administration Building, Room 238 B 967-4130

Pg. #		Cert. Comp.	1 Yr. Cert.	Dpl.	AAS Dgr.	AS Dgr.	AA Dgr.
46	Communication					x	
53	Criminal Justice				x	x	
57	Early Childhood Development	x			x	x	
60	Education					x	
102	Nursing						
	Practical Nursing		x				
	Registered Nursing				x		
133	Social Science						
134	Surgical Technician		x				

DIVISION OF HUMANITIES
Division Chair - Pam Gardner
Administration Building, Room 210 967-4338

Pg. #		Cert. Comp.	1 Yr. Cert.	Dpl.	AAS Dgr.	AS Dgr.	AA Dgr.
69	English/Humanities						
	Humanities						x
76	Fine Arts						
87	Languages						

DIVISION OF SCIENCES
Division Chair - Dave Ballard
Technology Building, Room 416 F 967-4150

Pg. #		Cert. Comp.	1 Yr. Cert.	Dpl.	AAS Dgr.	AS Dgr.	AA Dgr.
40	Biology					x	
51	Computer Science						
	Technology					x	
79	General Studies					x	
98	Mathematics						
108	Physical Education						
109	Physical Science					x	
110	Pre-Engineering						
	Chemical					x	
	Civil					x	
	Computer Science					x	
	Electrical					x	
	Manufacturing					x	
	Materials Sciences					x	
	Mechanical					x	

SCHOOL OF OCCUPATIONAL EDUCATION
Dean, Elwood Zaugg
Room 274A 967-4531

The School of Occupational Education is committed to providing state-of- the-art programs for a variety of occupations in demand. Programs in the School are guided by experts in industry who are committed to seeing that students have skills needed by the industry for employment.

The School is currently in the process of revising enrollment options so that students can better meet their own needs and time schedule and complete the schooling as fast as they are capable of doing. In recent studies it is evident that many of the jobs available in the next ten years will require six months or less specialized training. Through the variety of diplomas, certificates and degrees offered in the School of Occupational Education, students will be well prepared to accept these jobs.

DIVISION OF CONSTRUCTION AND SERVICE INDUSTRIES
Division Chair -Don Merrill
Construction Building, Room 262 967-4072

Pg. #		Cert. Comp.	1 Yr. Cert.	Dpl.	AAS Dgr.	AS Dgr.	AA Dgr.
27	Apprenticeship		x		x		
29	Arch. Tech.- CAD			x	x	x	
39	Barbering/Cosmetology			x	x		
42	Building Construction	x		x	x		
80	Graphic Design			x	x		
99	Medical Support Occup.						
	Med. Assistant		x				
	Med. Records Spec.	x					
	Medical Secretary		x				
	Nurse's Aide	x					
104	Office Info. Systems	x	x	x	x		
	Back-to-Work	x					
	Gen. Office Occup.		x				
	Info. Processing Sys.		x		x		
	Office Management				x		
	Secretary		x		x		
115	Printing		x				

DIVISION OF MECHANICS
Division Chair - John Udy
Auto Trades Building, Room 208 967-4138

Pg. #		Cert. Comp.	1 Yr. Cert.	Dpl.	AAS Dgr.	AS Dgr.	AA Dgr.
33	Automotive Col. Rpr.		x				
34	Automotive Painting		x				
33	Automotive Collision						
	Repair & Painting			x	x		
35	Automotive Technician	x		x	x		
37	Aviation Maint. Tech.			x	x		
61	Electricity		x	x	x		
83	Heavy Duty Mechanics	x		x	x		
92	Maintenance Mechanic		x	x	x		
119	Professional Truck Driving	x					
120	Refrigeration/ Air Cond.		x	x	x		
132	Small Equipment/						
	Vehicle Technician	x	x				
	Small Engine Repair						
139	Welding	x		x	x		

SKILLS CENTER OPERATIONS
Director - Paco Salazar
Riverside Campus, Room 110D 328-5510

These courses are open entry/open exit programs. Students may enroll anytime and complete when they meet the educational objectives. *The hours completed may not apply toward other college programs.*

- * Adult Basic Education
- * Child Care
- * Citizenship
- * Computer Learning Center
- * Cmptr Office Occupations
- * Computer Programming
- Training for Persons with Severe Disabilities
- ** Electronic Assembly
- ** Electronic Mechanics
- ** English As A Second Language
- * Beginning & Intermediate ESL
- * Job Club
- * Medical Records Specialist
- * Nurse's Aide
- ** Printing
- ** Production Machinist
- ** Professional Truck Driving
- ** Welding

* Programs listed under Skills Center Operations *Pages 124 - 132*
** Programs listed under Skills Center Operations and alphabetically or with other programs

ACCOUNTING

School of Business and Technology
Division of Business Systems
Business Building Room 105 967-4325

Faculty

Professors: Charles J. Herring, Rex B. Holt; *Associate Professor:* Ralph S. Child; *Assistant Professors:* Mark D. Moss, Lynnette M. Yerbury; *Instructors:* Gary Barnett

The Program

The Accounting Program is designed to prepare the student in basic accounting and management skills and refine these skills with sophisticated training in auditing, finance, taxes and communication. The curriculum includes training in computer utilization, as computer literacy is mandatory in today's world of business. General Education classes lend support to the business skills by providing training in effective writing, human relations and understanding, and in areas of interest to the student for personal development. This program leads to a Certificate or Associate of Applied Science Degree. ***If students desire to transfer to a four-year college they should pursue the Associate of Science.***

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete a degree. The classes designed to assist students in reaching the skill level necessary to enter the certificate and degree programs are: BUS 080 (Business Math), BUS 101 (Business English), CIS 102 (Computer Information Systems) and OIS 108 (WordPerfect for Non-OIS Majors). Any class in the preparatory skills may be waived if the student can demonstrate equivalent skill.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of Advisor and/or Division Chair.

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. Credit earned from ACCT 200 is applied toward graduation requirements as Business Elective credit.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $100-125 per quarter.

CERTIFICATE

(Minimum 48 Credit Hours Required)

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	101	Introduction to Business	4

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ ACCT	101	Elem Acct I	4	A	FIN 138, or w/FIN 138
___ ACCT	102	Elem Acct II	4	A	ACCT 101, FIN 138
___ ACCT	103	Cost Analysis	4	A	ACCT 102
___ BUS	115	Bus Com	3	A	BUS 101, ENG 101
___ CIS	110	Intro Bsc Prg	3	A	ACCT 101, FIN138
___ CIS	140	Cmptr Apl c	3	A	ACCT 101, CIS 102
___ CIS	145	Acct Cmptr	3	A	ACCT 102
___ ENG	101	Eng Comp	4	A	pre-test
___ FIN	138	Fin Math	5	A	pre-test
___ MGT	101	Intro to Bus	4	A	none
___ MGT	205	Lgl Envr Bus	5	A	none
___ OIS	131	Office Mach	2	A	pre-test

___ **Business Electives** (take 4 credits)

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 100 Credit Hours Required)

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	101	Introduction to Business	4

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ FIN	138	Fin Math	5	A	pre-test
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (72 credits)					
___ ACCT	101	Elem Acctg I	4	A	FIN 138 or w/FIN 138
___ ACCT	102	Elem Acctg II	4	A	ACCT 101, FIN 138
___ ACCT	103	Cost Analysis	4	A	ACCT 102

___	ACCT 203	Mgrl Acctg	4	A	ACCT 102
___	ACCT 204	Inter Acctg I	4	F	ACCT 102
___	ACCT 205	Inter Acctg II	4	W	ACCT 204
___	ACCT 206	Inter Acctg III	4	Sp	ACCT 205
___	BUS 115	Bus Com	3	A	BUS101, ENG101
___	BUS 230	Bus Rpt Wrtg	3	F,W,Sp	BUS 115
___	CIS 110	Intro Basic Prg	3	A	ACCT 101, FIN 138
___	CIS 140	Bus Cmptr Apl	3	A	ACCT 101, CIS 102
___	CIS 145	Acct Cmptr	3	A	ACCT 102
___	ECN 201	Macro Econ	4	A	MGT 101
___	FIN 221	Credit and Col	3	A	ACCT101 MGT101
___	MGT 101	Intro to Bus	4	A	none
___	MGT 205	Lgl Envr Bus	5	A	none
___	OIS 131	Offc Mach	2	A	pre-test

___ **Accounting Electives** (take 10 credits)

ACCT 190	Spl Proj (NAA)	1	F,W,Sp	none
ACCT 200	Acctg CO-OP	3-6	A	Soph & permission
ACCT 209	Fed Inc Tax	5	W	ACCT 102
ACCT 215	Cost Acctg	4	F	ACCT 102
ACCT 218	Audit Prep	4	Sp	ACCT 205
ACCT 299	Crt Tpcs Acctg	1-5	TBA	variable

___ **Business Electives** (take 1-3 credits)

**A*=All Quarters, *F*-Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF SCIENCE DEGREE

(Minimum 96 Credit Hours Required)

Students desiring to transfer to four-year colleges should pursue this degree.

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	105	Business Law I	5

Course			Cr	Taught*	Prerequisites
General Requirements (51 credits)					
Core Academic Skills					
___ CIS	102	CIS Intro	4	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (45 credits)

___ ACCT	101	Elem Acct I	4	A	FIN 138 or w/FIN 138
___ ACCT	102	Elem Acct II	4	A	ACCT 101, FIN 138
___ ACCT	203	Mgrl Acct	4	A	ACCT 102
___ BUS	115	Bus Com	3	A	BUS 101, ENG 101
___ BUS	215	Calc for Bus* *	4	A	MTH 105
___ ECN	201	Macro Ecn	4	A	MGT 101
___ ECN	202	Micro Ecn	4	A	MGT 101
___ FIN	138	Fin Math	5	A	pre-test
___ MGT	205	Lgl Evir Bus	5	A	none
___ MGT	220	Bus Statistics I	4	A	MGT 101, MTH 101
___ MGT	230	Bus Statistics II	4	A	MGT 220, MTH 105

**A*= All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

** BUS 215 is not required for Business Education and Marketing Education majors at some four-year universities and colleges.

☞ COM 120, PSY 101 and SOC 101 are recommended if transferring to the University of Utah. (One course in philosophy must be taken after transferring there.)

APPRENTICESHIP
Learning While Doing

School of Occupational Education
Division of Construction and Service Industries
Construction Trades Building Room 270 967-4066

Director Joe Mulvey

Apprenticeship programs are composed of two parts: (1) on the job training and, (2) classroom instruction. On the job training is provided by a sponsor who exposes the apprentice to practical applications in all phases of a particular craft. The classroom related instruction is an organized and systematic form of instruction designed to provide the apprentice with knowledge of the theoretical and technical aspects of his/her craft. Total completion of an apprenticeship program will take from 3 to 5 years depending upon the craft.

Salt Lake Community College provides classroom instruction for apprenticeship programs. The college neither provides on the job training nor acts as a sponsor for apprentices. Individuals must locate their own sponsor. Classes are held in the evenings and some programs are held on Saturdays. The classes will begin the 5th of September for the Monday/Wednesday (MW) classes and the 6th for the Tuesday/Thursday (TH) classes. Winter Quarter will start the 10th of December for the MW classes and the 13th for the TR classes. Classes will end on the 20th and 21st of March for their respective nights. Please check the quarterly class schedule for the dates and times of the program you desire..

The Bureau of Apprenticeship and Training (BAT) is the registering agency in the State of Utah for Apprenticeship Programs. Information on Apprenticeship Programs can be obtained by contacting them at:

Bureau of Apprenticeship and Training (BAT), Administration Building, Room 1051, 1745 West 1700 South, Salt Lake City, Utah 84104 (801) 524-5700.

BOILERMAKER

Boilermakers lay out and fabricate assemblies for boilers, pressure systems, and other steel products. They use blueprints, layout instruments, mathematical formulas and calculations to design parts for fabrication. Boilermakers assemble and finish products using electric, arc and acetylene welders, rivets and bolts. Working conditions vary with job locations.

Educational suggestions for high school subjects include basic mathematics, geometry, algebra, physics, welding, machine shop, blueprint reading, mechanical drawing. Entrance to the four year program is through applications and interviews as required by program sponsors.

For additional information call:
Boilermakers Union Office No. 182, 7304 South 300 West, Suite #204, Midvale, Utah 84047 (801) 562-0303.

CARPENTER

Carpenters construct, remodel, alter, or repair wood or wood in combination with other material structures. They work with wood and wood products, build concrete forms, platforms, structures, and work in conjunction with other trades such as iron workers, cement masons, brick layers, and other craft workers.

Three journeyman programs are being sponsored at the present time. The Utah Carpenters JATC and the Associated General Contractors are sponsoring a commercial carpentry program, and the Home Builders Association sponsors a residential program.

for additional information contact:
Program Director, Utah Carpenters' JATC, 2261 South Redwood Road, Suite J. Salt Lake City, Utah 84119 , (801) 972-5147. Program Director, Associated General Contractors, 1135 South West Temple, Salt Lake City, Utah 84101, (801) 363-2753. Program Director, Home Builders Association, 296 East 3900 South, Salt Lake City, Utah 84107 (801) 268-8750.

CHEF

This program is co-sponsored by the American Culinary Federation. It is patterned after the German Apprentice Program that requires college credit hours along with on the job training. Instruction is given in basic food preparation, food and beverage service, buffet catering, purchasing procedures, business math, supervision and training, garde-manger, sanitation, and nutrition. Classes are scheduled only on Mondays to accommodate local hotels and clubs. New students can start August 6. All classes are open to the public.

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ COK	150	Intro Food Serv	3	Sem 1	permission
___ COK	151	Food Serv I	3	Sem 1	COK 150
___ COK	152	Food & Bev Serv	3	Sem 2	COK 151
___ COK	153	Baking	3	Sem 2	COK 152
___ COK	154	Menu Design	3	Sem 3	COK 153
___ COK	155	Garde Manger I	3	Sem 3	COK 154
___ COK	156	Prchsng Prcd	3	Sem 4	COK 155
___ COK	157	Bus Math	3	Sem 4	COK 156
___ COK	158	Suprvsn &Trng	3	Sem 5	COK 157
___ COK	159	Nutrition	3	Sem 5	COK 158
___ COK	160	Sanitation	3	Sem 6	COK 159
___ COK	161	Garde Manger II	3	Sem 6	COK 160

ELECTRICIAN

The electrician is a compulsory licensed craftsman who plans, lays out and installs, alters or repairs electrical wiring, fixtures, apparatus and controls. A background in math (algebra, geometry, and trigonometry) is helpful. Two programs are offered:

The Electrical JATC program requires applications to be submitted. You must take the S-72R aptitude test and pass with a "high" score. Applications are screened based on JATC test results. The program requires 640 hours of related training and 10,000 on the job training hours to qualify to take the journeyman's examination.

The independent program requires 144 hours of related training each year and 8,000 hours of on the job training. Students seek own employment from independent sponsors for their on the job training.

Course			Cr	Taught	Prerequisites
Major Course Requirements					
___ ELI	121	Electricity I	7	yr 1	permission
___ ELI	122	Electricity I	7	yr 1	permission
___ ELI	153	Electricity II	7	yr 2	permission
___ ELI	154	Electricity II	7	yr 2	permission
___ ELI	225	Electricity III	7	yr 3	permission
___ ELI	226	Electricity III	7	yr 3	permission
___ ELI	257	Electricity IV	7	yr 4	permission
___ ELI	258	Electricity IV	7	yr 4	permission
___ ELI	259	Electricity V	7	yr 5	permission

For additional information contact:
Utah Electrical JATC, 2330 South Main St., Suite 14, Salt Lake City, Utah 84115 (801) 485-8811, - or - Bureau of Apprenticeship and Training (BAT), Administration Building, Room 1051, 1745 West 1700 South, Salt Lake City, Utah 84104 (801) 524-5700, - or - Apprenticeship Department, Salt Lake Community College, CT Room 270 (801) 967-4066

IRONWORKER

Ironworkers perform tasks in structural steel, ornamental iron, reinforcing steel, and rigging and machinery moving. Work is very physical, strenuous, and precise. Working conditions vary depending on the job. Applicants must be physically able to perform the required work and may be required to present a doctor's certificate of fitness.

The Ironworkers JATC requires applicants to pass a qualifying aptitude test. Some sponsors require high school transcripts and certificates of graduation, or the equivalent. The program runs 3 years, requires a minimum of 432 hours of related training and 6,000 hours of on-the-job training.

For additional information contact:
Ironworkers JATC, 2261 S. Redwood Rd., Salt Lake City, Utah 84119 (801) 972-8997, -or - Apprenticeship Department, Salt Lake Community College, CT Room 270 (801) 967-4066

MACHINIST

Machinists cut and shape metal to precise dimensions and fine finishes using turning lathes, shapers, milling machines, drill presses, precision grinders and finishing tools and materials. They read blueprints, drawing and sketches, taking dimension from them, and using precision instruments to make completed metal parts with tolerances as small as one ten-thousandth of an inch.

For additional information contact:
Bureau of Apprenticeship and Training (BAT), Administration Building, Room 1051, 1745 West 1700 South, Salt Lake City, Utah 84104 (801) 524-5700, - or - Apprenticeship Department, Salt Lake Community College, CT Room 270 (801) 967-4066.

OPERATING ENGINEER

Operating Engineers maintain and operate a great variety of construction and earth-moving equipment and stationary construction machines. Typical projects include bridges, highways, dams, and other large earth moving projects. This is a three year apprenticeship requiring 480 hours of related training and 6,000 hours of on the job training.

For additional information contact:
Coordinator, Operating Engineers JATC, 1958 West North Temple, Salt Lake City, Utah 84116 (801) 596-7785 -or- Program Director, Associated General Contractor, 1135 South West Temple, Salt Lake City, Utah 84101 (801) 363-2753.

PAINTER-DECORATOR/ PAPERHANGER

Although these are two separate skilled trades, some program sponsors require painter apprentices to master both skills. Painters prepare surfaces for finishing, mix and match colors, and use various tools to apply paints. This program lasts 3 years, and requires 432 hours of related training plus 6,000 hours of on-the-job training for completion. Both union and independent apprentices are trained in this program. All classes are open to independent contractors and the general public.

For additional information, contact:
Business Representative, Painters and Decorators' Local Union # 77, 360 West 1600 South, Salt Lake City, Utah 84115 (801) 466-3601 -or- Apprenticeship Department, Salt Lake Community College, CT Room 270 (801) 967-4066.

PLUMBER

Plumbing is a compulsory licensed trade where the plumber performs any mechanical work in the installation, maintenance, repair, removal and replacement of water supply and water/liquid waste removal. Plumbers work both inside and out, in greatly varying job conditions.

The JATC Plumbing program lasts 5 years with 1,080 hours of related training and 10,000 hours of on the job training. Applicants must take the Job Service Aptitude test. Employment is found via the Apprenticeship Committee. The Independent plumbing program requires 576 hours of related training and the completion of 8,000 hours of additional on the job training.

Independent Program Schedule. These courses will complete the related training portion of the apprenticeship and when combined with on the job training hours, students are eligible to take the State Journeyman's License Exam.

Course			Cr	Taught	Prerequisites
Major Course Requirements					
___ PLI	121	Plumbing I	7	yr 1	permission
___ PLI	122	Plumbing I	7	yr 1	permission
___ PLI	153	Plumbing II	7	yr 2	permission
___ PLI	154	Plumbing II	7	yr 2	permission
___ PLI	225	Plumbing III	7	yr 3	permission
___ PLI	226	Plumbing III	7	yr 3	permission
___ PLI	257	Plumbing IV	7	yr 4	permission
___ PLI	258	Plumbing IV	7	yr 4	permission

For additional information contact:
Bureau of Apprenticeship and Training (BAT), Administration Building, Room 1051, 1745 West 1700 South, Salt Lake City, Utah 84104 (801) 524-5700 - or - Salt Lake Community College (801) 967-4066.

REFRIGERATION

Refrigeration fitters do contract and custom installation, maintenance, service and repair of refrigeration and refrigerated air conditioning units and systems. They work with both new construction and in remodeling and repairing existing buildings. A person may specialize as installation or service mechanics. Much of the work is inside, and it requires extreme precision, good manual and finger dexterity, independent judgment and considerable strength and agility. This program lasts 5 years with 1,080 hours of related training and 10,000 hours of on-the-job training.

For additional information contact:
Bureau of Apprenticeship and Training (BAT), Administration Building, Room 1051, 1745 West 1700 South, Salt Lake City, Utah 84104 (801) 524-5700. Training (801) 524-5700 - or - Apprenticeship Department, Salt Lake Community College, CT Room 270 (801) 967-4066

ASSOCIATE OF APPLIED SCIENCE DEGREE

It is recommended that all students take the ACT, SAT, or the ASSET testing. However, it is required that all students seeking an AAS degree complete one of the prescribed tests. Students who choose to earn an AAS Degree are required to complete their indentured apprenticeship programs. Electricians and Plumbers are also required to demonstrate that they have passed the State of Utah Journeyman Exam. In addition to this, all students must complete applicable General Education classes. See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields.

ARCHITECTURAL TECHNOLOGY - CAD

School of Occupational Education

Division of Construction and Service Industries

Construction Trades Building Room 262 967-4074

Faculty

Associate Professor: Lawrence C. Jansen; *Assistant Professor:* Richard Ninow

The Program

Students in the Architectural Technology-CAD Program will learn to prepare working drawings from preliminary information and sketches and from verbal instructions using computer aided drafting (CAD). Instruction is also given in structural, mechanical, electrical systems, architectural detailing, presentation drawing, fundamental cost estimating, specification writing, building and zoning codes instruction and supervision of construction. Students will also learn how to develop structural calculations which require knowledge of geometry, algebra, trigonometry, physics, mechanics and strength of materials. Students are instructed also in methods of construction and technical writing skills. Students may begin this program during any quarter. They can complete specific classes according to their abilities. Specific classes are open to those who may have an interest in only a part of the total program.

Preparation

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program

Career Opportunities

Graduates can expect to earn $5.00 - $7.00 starting hourly salaries in offices of architects, engineers, contractors, materials suppliers and other construction practitioners.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Cooperative Education credit may be earned in lieu of the laboratory classes for completion of AAS degree requirements. To earn CO-OPcredit for one of these courses, the student must be employed in an architectural position and doing essentially the same work on the job

as would meet the objectives of the laboratory class on campus. Prior to enrollment in one of the lab courses, permission must be obtained from the Architectural Technology faculty COOP coordinator. The following courses are eligible for participation as COOP courses.

AT	210	Architectural and Structural Detailing - CAD
AT	220	Architectural Working Drawings I - CAD
AT	230	Architectural Working Drawings II - CAD

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: 1st year, $290;
2nd year, $180

DIPLOMA

(Minimum 95 Credit Hours Required)

Suggested First Quarter			Credits
AT	105	Basic Architectural Drafting	5
		- or -	
AT	110	Architectural Drafting I	4
AT	111	Architectural Construction I	5
AT	113	Architectural CAD I	1
MTH	101	Intermediate Algebra	5

Course			Cr	Taught*	Prerequisites
Major Course Requirements (95 credits)					
___ AT	105	Bsc Arch Drft	5	A	none
		- or -			
___ AT	110	Arch Drafting I	4	A	AT105 or permission
___ AT	111	Arch Constr I	5	F,W	none
___ AT	113	Arch CAD I	1	A	AT 110
___ AT	115	Arch Constr II	5	Sp	none
___ AT	120	Arch Draft II	4	A	AT 110
___ AT	123	Arch CAD II	1	A	AT 113
___ AT	130	Arch Draft III	4	A	AT 120
___ AT	132	Structures I	4	F	MTH 101
___ AT	133	Arch CAD III	1	A	AT 123
___ AT	134	Arch History	3	W	none
___ AT	202	Mech Elec Sys	3	A	none
___ AT	210	Arch Strtl CAD	5	A	AT 130
___ AT	211	Arch Constr III	3	F	none
___ AT	212	Arch Constr IV	3	W	none
___ AT	213	Arch Constr V	3	Sp	none
___ AT	215	Structures II	4	W	AT 132
___ AT	216	Arch Spv Spec	2	W	none
___ AT	220	Wkg/Dr I CAD	5	A	AT 210
___ AT	226	Structures III	4	Sp	AT 215
___ AT	229	Codes Zoning	3	W	none
___ AT	230	Wkg/Dr II CAD	5	A	AT 220
___ AT	236	Perspective I	3	W,Sp	AT 105 or 110
___ AT	237	Perspective II	3	Sp,Su	AT 236
___ AT	239	Cmptr Arch Est	3	Sp	none
___ ENG	101	English Comp	4	A	pre-test
___ MTH	101	Interm Algebra	5	A	pre-test
___ PHY	101	Intro to Physics	5	A	MTH 101

___ **AT Elective** (take 3 credit hours if AT 105 not selected)

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 115 Credit Hours Required)

Suggested First Quarter			Credits
AT	105	Basic Architectural Drafting	5
		- or -	
AT	110	Architectural Drafting I	4
AT	111	Architectural Construction I	5
AT	113	Architectural CAD I	1
MTH	101	Intermediate Algebra	5

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ Communications			3	A	variable
___ ENG	101	English Comp	4	A	pre-test
___ MTH	101	Inter Algebra	5	A	pre-test
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (86 credits)					
___ AT	105	Bsc Arch Drft	5	A	none
		- or -			
___ AT	110	Arch Drafting I	4	A	AT105 or permission
___ AT	111	Arch Constr I	5	F,W	none
___ AT	113	Arch CAD I	1	A	AT 110
___ AT	115	Arch Constr II	5	Sp	none
___ AT	120	Arch Draft II	4	A	AT 110
___ AT	123	Arch CAD II	1	A	AT 113
___ AT	130	Arch Draft III	4	A	AT 120
___ AT	132	Structures I	4	F	MTH 101
___ AT	133	Arch CAD III	1	A	AT 123
___ AT	134	Arch History	3	W	none
___ AT	202	Mech Elec Sys	3	A	none
___ AT	210	Arch Strtl CAD	5	A	AT 130
___ AT	211	Arch Constr III	3	F	none
___ AT	212	Arch Constr IV	3	W	none
___ AT	213	Arch Constr V	3	Sp	none
___ AT	215	Structures II	4	W	AT 132
___ AT	216	Arch Spv Spec	2	W	none
___ AT	220	Wkg/Dr I CAD	5	A	AT 210
___ AT	226	Structures III	4	Sp	AT 215
___ AT	229	Codes Zoning	3	W	none
___ AT	230	Wkg/Dr II CAD	5	A	AT 220
___ AT	236	Perspective I	3	W,Sp	AT 105 or AT 110
___ AT	237	Perspective II	3	Sp,Su	AT 236
___ AT	239	Cmptr Arch Est	3	Sp	none
___ PHY	101	Intro to Physics	5	A	MTH 101

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF SCIENCE DEGREE

(Minimum 108 Credit Hours Required)

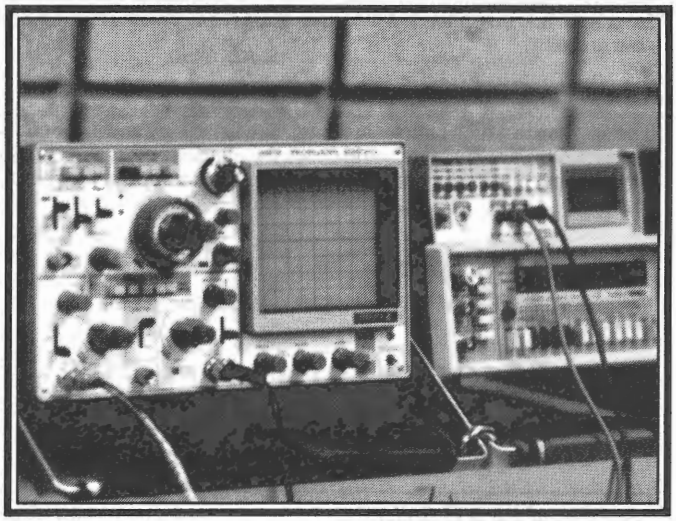
Suggested First Quarter			Credits
AT	105	Basic Architectural Drafting	5
		- or -	
AT	110	Architectural Drafting I	4
AT	111	Architectural Construction I	5
AT	113	Architectural CAD I	1
MTH	101	Intermediate Algebra	5

Course			Cr	Taught*	Prerequisites
General Requirements (51 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (45 credits)					
___ AT	105	Bsc Arch Drft	5	A	none
		- or -			
___ AT	110	Arch Drafting I	4	A	AT105 or permission
___ AT	113	Arch CAD I	1	A	AT 110
___ AT	120	Arch Draft II	4	A	AT 110
___ AT	123	Arch CAD II	1	A	AT 113
___ AT	130	Arch Draft III	4	A	AT 120
___ AT	133	Arch CAD III	1	A	AT 123
___ AT	134	Arch History	3	W	none
___ AT	210	Arch Strtl CAD	5	A	AT 130
___ AT	220	Wkg/Dr I CAD	5	A	AT 210
___ AT	226	Structures III	4	Sp	AT 215
___ AT	229	Codes Zoning	3	W	none
___ AT	230	Wkg/Dr II CAD	5	A	AT 22
___ PHY	101	Intro to Physics	5	A	MTH 101
Electives		(take a minimum of 12 credit hours from at least four approved courses)			
AT	111	Arch Constr I	5	F,W	none
AT	115	Arch Constr II	5	Sp	none
AT	202	Mech Elec Sys	3	A	none
AT	211	Arch Constr III	3	F	none
AT	212	Arch Constr IV	3	W	none
AT	213	Arch Constr V	3	Sp[	none
AT	216	Arch Spv Spec	2	W	none
AT	229	Codes Zoning	3	W	none
AT	236	Perspective I	3	W,Sp	AT 110
AT	237	Perspective II	3	Sp,Su	AT 236
AT	239	Cmptr Arch Est	3	Sp	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



AUTOMATED SYSTEMS TECHNOLOGY

School of Business and Technology
Division of Technology
Metal Trades Building Room 228 967-4098

Faculty

Assistant Professors: William Frangos, Dennis Murphy

The Program

The Automated Systems Technology Program is designed to train students to install, calibrate, maintain, service, and repair automated equipment. The program offers an AAS Degree upon completion. Training includes electrical power, basic electronics, digital, mechanical systems, hydraulics, pneumatics, electromechanical devices, optics, robotics, computer applications and related general education.

The Program is a merging of electronics, electricity, computers, robotics, and mechanical subjects. The graduate will be able to work with a variety of automated systems.

Preparation Note

ASSET testing will be done upon entry to the college unless the student has had prior college-level experience. Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete a degree. Those wishing to enter this program must score above accepted minimums on the ASSET test. Enrollment is somewhat limited, therefore a selection process is required. A high school curriculum oriented in mathematics, science, and communication skills is highly recommended.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken. Requirements for AST 100 and AST 101 must be satisfied before the student can be matriculated in the program.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a

business, industrial, or government work environment. Credit earned from AST 200 is applied toward graduation requirements as a required course credit.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $100 - $150 per quarter

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 147 Credit Hours Required)

Suggested First Quarter			Credits
AST	101	Fundamentals of Automated Systems	2
AST	105	Fundamentals of Electronics	7
CL	130	Microcomputer Programming In BASIC	3
MTH	101	Intermediate Algebra	5

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ MTH	101	Inter Algebra	5	A	pre-test
___ Reading		(determined by dept)		A	variable
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (118 credits)

___ AST	101	Fdmt Aut Sys	3	F,W,Sp	none
___ AST	105	Fdmt Elctrn	7	F,W,Sp	AST 101
___ AST	106	Ind Electronics	6	F,W,Sp	AST 105, MTH 101
___ AST	110	Mech & Dev	3	Sp	w/AST 106
___ AST	200	COOP	3-12	A	Soph & permission
___ AST	205	Power Systms	5	F	AST 106
___ AST	221	Micro Apl	5	W,Sp	ELET 173
___ AST	230	CNC/CAM	5	F	ELET 173
___ AST	250	Auto Data Acq	5	F	AST 205
___ AST	270	Cmptr Rbtic	5	F	MTH 106
___ AST	290	Aut Elctrn Sys	5	W	ELET 121, 131
___ CD	208	Cmptr Draft	3	Su	AST 106 or ELET 101, 153 or ENGR 101 or MFG 150
___ CHEM	121	Prcpl of Chem	5	F,W,Sp	MTH 105
___ CL	130	BASIC	3	A	MTH 101
___ ECN	105	Svy of Econ	5	A	none
___ ELET	130	Dig Crct I	6	A	AST 106
___ ELET	131	Digital Crct II	6	A	ELET 130
___ ENG	130	Tech Wrtg	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ MTH	106	Pl Trig	5	A	MTH 105
___ MTH	111	Calculus I	5	A	MTH 106
___ PHY	117	Mechanics	5	A	MTH 106 or ELET 106
___ PHY	118	Ht, Lgt & Snd	5	W,Sp,Su	PHY 117

___ AST Electives (take 5 credits)

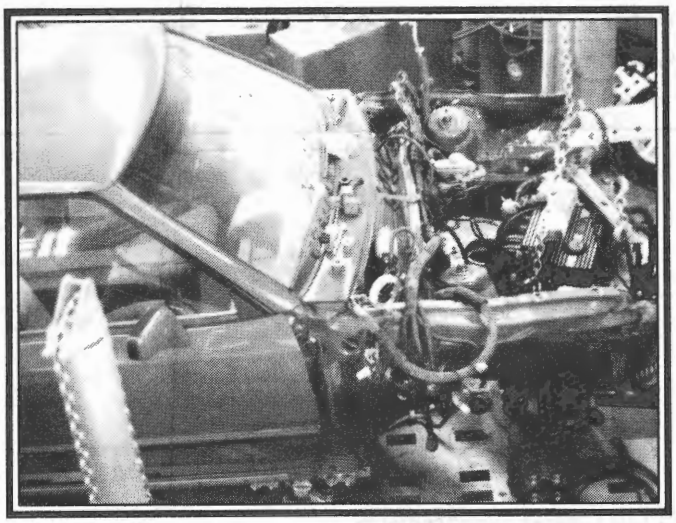
AST	240	Telecom	5	W	Instr apprvl
ELET	245	Las/Fib Optics	6	W,Su	Instr apprvl
MFG	150	Rel Mach Shp	5	F	none
WLD	105	Rel Welding	3	F,W,Sp	none

___ Programming Language Electives (take 4 credits)

CIS	112	PASCAL Prg	4	A	CIS 105, FIN 138
CIS	270	C-Lang Prg	5	F,Sp	CIS 111 or 112
CS	170	FORTRAN 77	4	A	MTH 106, CIS 101 or ENGR 101
CS	180	C-Lang Prg	4	A	CS 150
CS	211	BASIC Lang	4	F	ENGR 101
		or			
CIS	111	BASIC Prg	5	F	CIS 105, FIN 138

☞ ECN 201 or ECN 202 may be taken in place of ECN 105

*A=All Quarters, F-Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable



AUTOMOTIVE COLLISION REPAIR AND PAINTING

School of Occupational Education
Division of Mechanics
Auto Trades Building Room 206 967-4138

AUTOMOTIVE COLLISION REPAIR

Faculty
Professor: Neal D. Grover

The Program
Auto Collision Repair technicians are skilled individuals who repair damaged motor vehicles by straightening bent structures, removing dents from fenders and body panels, welding torn metal and replacing badly damaged parts. Collision repair technicians usually are qualified to repair all types of vehicles, although most work is on automobiles and small trucks. The collision repair technician's work is characterized by variety because each damaged vehicle presents a different problem.

Preparation Note
The collision repair technician's work requires fast job analysis and ability to visualize what is needed to restore the damaged automobile. Welding light gauge metal is one of the skills to be acquired along with parts repair and replacement. Those people interested in entering auto collision repair should be in good physical condition and have good eye-hand coordination. Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites
It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options
If a student is employed in a job involving Automotive Collision Repair, it is possible to earn some laboratory credit through Cooperative Education. With prior approval of Prof. Grover and the faculty CO-OP coordinator for the Division of Mechanics, the student would register for the regular laboratory course. (A "Section 80" designation identifies that credit is being earned through CO-OP.)

Class Availability
The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies
Estimated cost of tools and supplies: $530
Estimated cost of books: $50

CERTIFICATE
(Minimum 49 Credit Hours Required)

Suggested First Quarter			Credits
ACR	110	Automotive Collision Repair Lab	7
ACR	111	Metallurgy and Process Theory	5
WLD	108	Welding Light Gauge Metal	3

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ ACR	110	C & R Lab	7	F	w/ACR 111
___ ACR	111	Met &Proc	5	F	w/ACR 110
___ ACR	120	C & R Lab	7	W	ACR 110,111 w ACR 121
___ ACR	121	S A S & R	5	W	ACR 110,111 w/ACR120
___ ACR	130	Adv ACR	7	Sp	ACR 120-121 w/ACR 131
___ ACR	131	E & A Thry	5	Sp	ACR 120,121 w/ACR 130
___ COM	110	Org Intpl Com	3	A	none
___ IND	108	Ind Electr	2	F,W,Sp	none
___ IND	147	Math for Ind	5	F,W,Sp	permission
___ WLD	108	Welding	3	F	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

AUTOMOTIVE COLLISION REPAIR AND PAINTING

Faculty
Professor: Neal D. Grover; *Instructor:* Chuck Spainhower

The Program
This is a two-year composite program of both Automotive Painting and Collision Repair. Students enrolled in the program register for the same theory and laboratory classes but the related education classes will differ from those offered in the Auto Paint and Auto Collision Repair Certificate Programs.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites
It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options
As previously indicated for the two programs taken separately, it is possible for a student working in Automotive Painting and Collision Repair to earn laboratory credit through the "Section 80" CO-OP lab course.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost of tools and supplies: $550
Estimated cost of books: $50

DIPLOMA

(Minimum 97 Credit Hours Required)

Suggested First Quarter			Credits
ACR	110	Automotive Collision Repair Lab	7
ACR	111	Metallurgy and Process Theory	5
WLD	108	Welding Light Gauge Metal	3

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ ACR	110	A C R Lab	7	F	w/ACR 111
___ ACR	111	M&P Thry	5	F	w/ACR 110
___ ACR	120	C & R Lab	7	W	ACR110,111 w/ACR 121
___ ACR	121	S A S & R	5	W	ACR110,111 w/ACR 120
___ ACR	130	Adv ACR	7	Sp	ACR 120,121 w/ACR 131
___ ACR	131	E &A Thry	5	Sp	ACR 120,121 w/ACR130
___ AP	110	Painting Lab	7	F	w/AP 111
___ AP	111	Painting Thry	5	F	w/AP 110
___ AP	120	App Lab	7	W	AP 110,111 w/AP 121
___ AP	121	App Thry	5	W	w/AP 120
___ AP	130	Match Lab	7	Sp	ACR 120-121 w/ACR 131
___ AP	131	Match Thry	5	Sp	AP120,121 w/ACR 130
___ COM	110	Org, Intpl Com	3	A	none
___ GD	127	Color	3	W,Sp	none
___ IND	108	Ind Electr	2	F,W,Sp	none
___ IND	147	Math for Ind	5	F,W,Sp	permission
___ MGT	110	Sm Bus Mgt	3	F,W,Sp	none
___ PTM	110	Prcpl of Tech I	4	TBA	none
___ WLD	108	Welding	3	F	none

___ **Electives** (Take 2-5 credits (as approved by advisor)

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 114 Credit Hours Required)

Suggested First Quarter			Credits
ACR	110	Auto Collision Repair	7
ACR	111	Metallurgy and Processing	5
WLD	108	Welding Light Gauge Metals	3
		OR the following courses:	
AP	110	Paint Lab	7
AP	111	Paint Theory	5
IND	147	Math for Industry	5

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ IND	147	Math for Ind	5	F,W,Sp	permission
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements					
___ ACR	110	A C R Lab	7	F	w/ACR 111
___ ACR	111	M&P Thry	5	F	w/ACR 110
___ ACR	120	C & R Lab	7	W	ACR 110,111 w/ACR 121
___ ACR	121	S A S & R	5	W	ACR110,111 w/ACR 120
___ ACR	130	Adv ACR	7	Sp	ACR 120,121 w/ACR 131
___ ACR	131	E &A Thry	5	Sp	ACR 120,121 w/ACR130
___ AP	110	Painting Lab	7	F	w/AP 111
___ AP	111	Painting Thry	5	F	w/AP 110
___ AP	120	App Lab	7	W	AP 110,111 w/AP 121
___ AP	121	App Thry	5	W	w/AP 120
___ AP	130	Match Lab	7	Sp	ACR 120-121 w/ACR 131
___ AP	131	Match Thry	5	Sp	w/ACR 130
___ GD	127	Color	3	W,Sp	none
___ IND	108	Ind Electr	2	F,W,Sp	none
___ MGT	110	Sm Bus Mgt	3	F,W,Sp	none
___ WLD	108	Welding	3	F	none

___ **Electives** (Take 2-5 credits) as approved by advisor

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

AUTOMOTIVE PAINTING

Faculty

Instructor: Chuck Spainhower

The Program

Automobile painters restore damaged motor vehicles to "look like new" appearance. These skilled technicians repaint vehicles that have lost the luster of their original paint and the repaired portions of vehicles damaged in accidents. The painter prepares the vehicle to receive the new finish. A spray gun is then used to apply primer coats to the automobile's surface. After the primer coat dries, the surface is sanded until it is smooth enough to be painted.

Before painting repaired portions of an automobile, the painter may mix paints or colors to match the existing color of the car. The spray gun must be handled skillfully so the paint is applied evenly. A knowledge of the various materials and supplies used in the refinishing process is vital. The program requires manual dexterity, average scholastic ability, and an appreciation and understanding of color. Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost of tools and supplies: $345
Estimated cost of books: $50

CERTIFICATE

(Minimum 49 Credit Hours Required)

Suggested First Quarter			Credits
AP	110	Automotive Painting Lab	7
AP	111	Automotive Painting Theory	5
IND	147	Math for Industry	5

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ AP	110	Painting Lab	7	F	w/AP 111
___ AP	111	Painting Thry	5	F	w/AP 110
___ AP	120	App Lab	7	W	AP 110,111 w/AP 121
___ AP	121	App Thry	5	W	AP 110,111 w/AP 120
___ AP	130	Match Lab	7	Sp	AP 120,121 w/AP 131
___ AP	131	Match Thry	5	Sp	AP 120,121 w/AP 130
___ COM	110	Org, Intpl Com	3	A	none
___ GD	127	Color	3	W,Sp	none
___ IND	108	Ind Electr	2	F.W.Sp	none
___ IND	147	Math for Ind	5	F.W,Sp	permission

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

AUTOMOTIVE TECHNICIAN

School of Occupational Education

Division of Mechanics

Auto Trades Building Room 206 967-4138

Faculty

Professors: Larry Barlage, Ray M. Southwick; *Assistant Professor*: Vince Badger; *Instructors:* Brett Baird, Don Burdett, Jerry Johnson.

The Program

The six quarter Automotive Technician program is designed to train students in both domestic and imported vehicle mechanics. A graduate should find a wide selection of job opportunities upon completion of the program.

Most automobile technicians perform a variety of repairs. Some technicians--such as automotive transmission specialists, tune-up experts, automobile air conditioning specialists, front end and brake mechanics-- specialize in one or two types of repair.

Most technicians are required to purchase their own hand tools. Employers furnish engine analyzers, test equipment, and special tools for servicing units such as automatic transmissions. Prospective auto mechanics should be in good physical condition and have above average mechanical aptitude and eye-hand coordination.

Preparation

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Option

If a student is employed in a job involving Automotive Repair, it is possible to earn some laboratory credit through Cooperative Education. With prior approval of a teaching faculty member and the Faculty CO-OP Coordinator for the Division of Mechanics the student would register for the regular laboratory course. (A "Section 80" designation identifies that credit is being earned through CO-OP.)

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost for tools and supplies: $675
Estimated cost for books per quarter: $75

DIPLOMA

(Minimum 98 Credit Hours Required)

Suggested First Quarter			Credits
AUT	130	Automotive Engine Lab	7
AUT	131	Automotive Engine Theory	5
IND	147	Math for Industry	5
		or	
AUT	120	Basic Tune-Up & Electrical Lab	7
AUT	121	Basic Tune-Up & Electrical Theory	5
IND	108	Industrial Electronics	2
PTM	110	Principles of Technology I	4
		or	
AUT	110	Four Wheel Alignment and Brakes Lab	7
AUT	111	Four Wheel Alignment and Brakes Theory	5
WLD	105	Related Welding	3

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ AUT	110	Algn Brks Lab	7	F,W,Sp	w/AUT 111
___ AUT	111	Algn Brks Thry	5	F,W,Sp	w/AUT 110
___ AUT	120	Tne-Up Elec L	7	F,W,Sp	w/AUT 121
___ AUT	121	Tne-Up Elec T	5	F,W,Sp	w/AUT 120
___ AUT	130	A Engines Lab	7	F,W,Sp	w/AUT 131
___ AUT	131	A Engns Thry	5	F,W,Sp	w/AUT 130
___ AUT	210	Cmptr Eltrn & Adv Fl Sys L	7	F,W,Sp	AUT 110, 120, 130, w/AUT 211
___ AUT	211	Cmptr Eltrn & Adv Fl Sys L	5	F,W,Sp	AUT 110, 120, 130; w/AUT 210
___ AUT	220	Drv Mech Lab	7	F,W,Sp	AUT 110, 130, w/AUT 221
___ AUT	221	Drv Mech Thry	5	F,W,Sp	AUT 110, 130, w/AUT 220
___ AUT	230	Rev Diag Lab	7	F,W,Sp	AUT 110, 120, 130, w/ AUT 231
___ AUT	231	Rev Diag Thry	5	F,W,Sp	AUT 110, 120, 130, w/ AUT 230
___ COM	110	Org Intpl Com	3	A	none
___ IND	108	Ind Electronics	2	F,W,Sp	none
___ IND	147	Math Industry	5	F,W,Sp	permission
___ LE	122	Career Dev	3	A	none
___ MGT	110	Sml Bus Mgt	3	F,W,Sp	none
___ PTM	110	Prcpl Tech I	4	TBA	none
___ WLD	105	Rel Welding	3	F,W,Sp	none
___ **Electives** (take 3-5 general education credits)					

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 113 Credit Hours Required)

Suggested First Quarter			Credits
AUT	130	Automotive Engine Lab	7
AUT	131	Automotive Engine Theory	5
IND	147	Math for Industry	5
		or	
AUT	120	Basic Tune-Up & Electrical Lab	7
			cont. next pg

AUT	121	Basic Tune-Up & Electrical Theory	5
IND	108	Industrial Electronics	2
PTM	110	Principles of Technology I	4
		or	
AUT	110	Four Wheel Alignment and Brakes Lab	7
AUT	111	Four Wheel Alignment and Brakes Theory	5
WLD	105	Related Welding	3

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ IND	147	Math Industry	5	F,W,Sp	permission
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable
___ Choose an additional 12 credit hours from at least three of the following general education areas: Biological Science, Physical Science, Humanities, Social Science					
(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)					
Major Course Requirements (84 credits)					
___ AUT	110	Algn Brks Lab	7	F,W,Sp	w/AUT 111
___ AUT	111	Algn Brks Thry	5	F,W,Sp	w/AUT 110
___ AUT	120	Tne-Up Elec L	7	F,W,Sp	w/AUT 121
___ AUT	121	Tne-Up Elec T	5	F,W,Sp	w/AUT 120
___ AUT	130	A Engines Lab	7	F,W,Sp	w/AUT 131
___ AUT	131	A Engns Thry	5	F,W,Sp	w/AUT 130
___ AUT	210	Cmptr Eltrn & Adv Fl Sys L	7	F,W,Sp	AUT 110, 120, 130, w/AUT 211
___ AUT	211	Cmptr Eltrn & Adv Fl Sys L	5	F,W,Sp	AUT 110, 120, 130, w/AUT 210
___ AUT	220	Drv Mech Lab	7	F,W,Sp	AUT 110, 130 w/AUT 221
___ AUT	221	Drv Mech Thry	5	F,W,Sp	AUT 110, 130, w/AUT 220
___ AUT	230	Rev Diag Lab	7	F,W,Sp	AUT 110, 120, 130, w/ AUT 231
___ AUT	231	Rev Diag Thry	5	F,W,Sp	AUT 110, 120, 130, w/ AUT 230
___ IND	108	Ind Electronics	2	F,W,Sp	none
___ MGT	110	Sml Bus Mgt	3	F,W,Sp	none
___ PTM	110	Prcpl Tech I	4	TBA	none
___ WLD	105	Rel Welding	3	F,W,Sp	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

FORD MOTOR ASSET PROGRAM

ASSET (Automotive Student Service Educational Training) is a two-year college program leading to an Associate of Applied Science Degree in Automotive Technology. It is a joint effort of Ford Motor Company, SLCC and a sponsoring Ford or Lincoln-Mercury dealership.

ASSET utilizes one quarter of classroom/lab instruction alternating with specific periods of full-time work experience at a Ford or Lincoln-Mercury dealership.

Technical training on Ford automotive products will be provided in the classroom, in the laboratories, and in the dealership and will cover the latest developments of Ford technology including: engines, fuel management, electronics, transmission/transaxles, brake systems suspensions and air conditioning. In addition, courses in mathematics,

physical science and humanities will provide a well-rounded academic background necessary to communicate and reason effectively.

Student Selection Procedure

(Entrance into this program is only available when Ford Motor requests new students)

1. An individual interested in becoming an ASSET student will be given an application form to complete. This form can be obtained from: Les Cook, ASSET Admissions Advisor, Salt Lake Community College, (801) 967-4299.
2. After the student has submitted the application form to the school and completed the assessment testing, the ASSET coordinator will interview the prospective student and arrange for an interview with a Ford or Lincoln/Mercury dealer in the Salt Lake and surrounding areas. Students selected by a dealer will be registered for the ASSET program.

Student Eligibility Criteria

To be eligible for the ASSET Program the applicant must be:

1. Eighteen years of age or older by the time of first dealer work assignment.
2. A high school graduate or equivalent.
3. Able to meet the school's general admission and academic requirements.
4. Sponsored by a Ford/Lincoln-Mercury dealer.
5. Hold and maintain a valid driver's license.

AUTOMOTIVE MECHANICS

Suggested First Quarter
This is an open entry/open exit program. Students may enroll anytime during the first three weeks of a quarter and complete when they meet the educational objectives. *The hours completed do not apply toward other college programs.*

General Information

Student learns the general background in the automotive specialty areas of engine rebuild, tune-up, and brakes. Students will learn how to use appropriate tools and tests to service and repair braking systems, tires, and engines. Students also learn proper methods of shop safety.

Special Requirements

Good vision, spatial aptitude, manual dexterity, adequate range of motion, valid driver's licence and the ability to lift 30-50 lbs. Basic reading and math skills.

Job Information

After training, the student, depending on which units are completed, will be able to perform tests and diagnose problems in engines, brakes, tires, and drive train mechanisms. The student will be able to disassemble, repair, reassemble, and tune engines using a variety of tools and tests. The student will be able to diagnose problems and adjust brake problems and perform brake inspections. The student will align wheels and correct drive train mechanisms.

Courses

Students will complete three of the courses and Job Club.

Courses	Hours	Course	Hours
Engines	265	Basic Tune-Up	265
Wheel Alignment & Brakes	265	Drive Mechanisms	265
Job Club	60		
Total Hours	**855**		

AVIATION MAINTENANCE TECHNICIAN

School of Occupational Education
Division of Mechanics
Auto Trades Building Room 206 967-4138

Faculty

Assistant Professor: Brian Williamson; *Instructors*: Larry Hancock, Clarence Montgomery, Clifford Wiesenberg, Jeff Woolley

Location Airport I (551 North 2200 West)

The Program

The six quarter Aviation Maintenance Technician Program is designed to train students in the repair and maintenance of aircraft relative to engines and airframes. Airframe and powerplant mechanics are required to repair, troubleshoot, install, and administer in aircraft preventive maintenance programs.

The Aviation Maintenance Technician Program is designed to give a student the knowledge and skills to perform repairs and maintenance at a level required to pass the F.A.A. written, oral, and practical exams for an Airframe and Powerplant Mechanics License. Student must meet hours of training as required by FAA.

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program. Those wishing to enter this program must score above accepted minimums on the ASSET Test. Enrollment is limited, therefore a selection process is required. A high school curriculum oriented in mathematics, science, and communication skills is highly recommended.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost for tools and supplies: $490
Estimated cost for books per quarter: $55

DIPLOMA

(Minimum 103 Credit Hours Required)

Suggested First Quarter			Credits
AMT	105	Math	5
AMT	110	Gen I Lab	7
AMT	111	General Theory	8

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ AMT	101	Bprint Reading	5	TBA	none
___ AMT	105	Math	5	TBA	none
___ AMT	110	Gen I Lab	7	TBA	w/AMT 111
___ AMT	111	Gen I Thry	8	TBA	w/AMT 110
___ AMT	120	Arfrm I Lab	7	TBA	AMT 110, 111 w/AMT 121
___ AMT	121	Arfrm I Thry	8	TBA	AMT 110, 111 w/AMT 120
___ AMT	130	Arfrm II Lab	7	TBA	AMT 120, 121 w/AMT 131
___ AMT	131	Arfrm II Thry	8	TBA	AMT 120, 121 w/AMT 130
___ AMT	210	P I & A III Lab	7	TBA	AMT 110, 111 w/AMT 211
___ AMT	211	P I & A III Thry	8	TBA	AMT 110, 111 w/AMT 210
___ AMT	220	P II Lab	7	TBA	AMT 210, 121 w/AMT 220
___ AMT	221	P II Thry	8	TBA	AMT 210, 121 w/AMT 220
___ AMT	230	P III Lab	7	TBA	AMT 210, 211 w/AMT 231
___ AMT	231	P III Thry	8	TBA	AMT 210, 211 w/ AMT 230
___ COM	110	Org Intpl Com	3	A	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable.

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 132 Credit Hours Required)

Suggested First Quarter			Credits
AMT	105	Math	5
AMT	110	Gen I Lab	7
AMT	111	General Theory	8

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ AMT		Math	5	TBA	pre-test
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Course			Cr	Taught*	Prerequisites
Major Course Requirements (103 Credits)					
___ AMT	101	Bprint Reading	5	TBA	none
AMT	105	Math	5	TBA	none
AMT	110	Gen I Lab	7	TBA	w/AMT 111
___ AMT	111	Gen I Thry	8	TBA	w/AMT 110
___ AMT	120	Arfrm I Lab	7	TBA	AMT 110, 111 w/AMT 121
___ AMT	121	Arfrm I Thry	8	TBA	AMT 110, 111 w/AMT 120
___ AMT	130	Arfrm II Lab	7	TBA	AMT 120, 121 w/AMT 131
___ AMT	131	Arfrm II Thry	8	TBA	AMT 120, 121 w/AMT 130
___ AMT	210	P I & A III Lab	7	TBA	AMT 110,111 w/AMT 21 1
___ AMT	211	P I & A III Thry	8	TBA	AMT 110, 111 w/AMT 210
___ AMT	220	P II Lab	7	TBA	AMT 120, 121 w/AMT 220
___ AMT	221	P II Thry	8	TBA	AMT 120, 121 w/AMT 220
___ AMT	230	P III Lab	7	TBA	AMT 210, 211 w/AMT 231
___ AMT	231	P III Thry	8	TBA	AMT 210, 211 w/ AMT 230
___ COM	110	O& I Com	3	A	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

BARBERING/ COSMETOLOGY

School of Occupational Education
Division of Construction and Service Industries
Construction Trades Building Room 262 967-4074

Faculty

Instructors: Grace Birch, Bob Cantonwine, Susan Curtis, Rod Derrick, Joe Italasano, Jeri McDonald, Jeri Sheehy

The Program

Learning is approached on a personalized basis with appropriate discussion and lectures. Theory and lab classes must be taken concurrently. Clock hour credit toward licensing will be awarded with passing grades in both theory and lab classes for each quarter. Requires 2,000 clock hours of instruction and diploma to take the State Licensing Examination.

To retain training station, students must continue through program without interruption. Unlimited opportunities are available for skilled hair stylists. A high degree of diversified skill is necessary for success in this field.

Cosmetology emphasizes learning to design hair to enhance beauty. The study of chemicals provides knowledge related to maintaining the proper condition, color, and curl of the hair.

Instruction is also given in make-up, manicuring, and skin care. Current and past fashion trends are studied to provide familiarization with cycles of hair styles and designs. This creative field can be highly individualistic. Specialization in cutting, coloring, permanent waving, or tricology is possible.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Option

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Books and Supplies

Estimated cost of tools and supplies: 1st quarter, $200;
3rd quarter, $125
Estimated cost of books per quarter: $20

DIPLOMA

(Minimum 100 Credit Hours Required)

Suggested First Quarter			Credits
BR	110	Barbering Lab	9
BR	111	Barbering Theory	5
COM	110	Organizational and Interpersonal Communication	3

Course				Cr	Taught*	Prerequisites
Major Course Requirements						
___	BR	110	Barbering Lab	9	A	none
___	BR	111	Barbering Thry	5	A	none
___	BR	120	Barbering Lab	9	A	previous lab
___	BR	121	Barbering Thry	5	A	BR 111
___	BUS	080	Business Math	3	A	none
___	COM	110	Org Intpl Com	3	A	none
___	COM	120	Prcpls Pub Spkg	4	A	none
___	COS	130	Cosmtlgy Lab	9	A	none
___	COS	131	Cosmtlgy Thry	5	A	BR 121
___	COS	140	Cosmtlgy Lab	9	A	previous lab
___	COS	141	Cosmtlgy Thry	5	A	COS 131
___	COS	190	Color	3	F,Sp	COS 130
___	BR	150	Barbering Lab	9	A	previous lab
			or			
___	COS	150	Cosmtlgy Lab	9	A	previous lab
___	BR	151	Barbering Thry	5	A	BR 121
			or			
___	COS	151	Cosmtlgy Thry	5	A	COS 141
___	BR	160	Barbering Lab	9	A	previous lab
			or			
___	COS	160	Cosmtlgy Lab	9	A	previous lab
___	BR	161	Barbering Thry	5	A	BR 151
			or			
___	COS	161	Cosmtlgy Thry	5	A	COS 151
___	MGT	110	Sm Bus Mgt	3	F,W,Sp	none
	Recommended					
___	CST	101	Customer Srv	3	A	none
	Optional if additional hours are required:					
___	BR	170	Barbering Lab	9	A	previous lab
			or			
___	COS	170	orsmtlgy Lab	9	A	previous lab
___	BR	171	Barbering Thry	5	A	BR 161
			or			
___	COS	171	Cosmtlgy Thry	5	A	COS 161

*A=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 121 Credit Hours Required)

Suggested First Quarter			Credits
BR	110	Barbering Lab	9
BR	111	Barbering Theory	5
COM	110	Organizational and Interpersonal Communication	3

Course			Cr	Taught*	Prerequisites
General Requirement (27 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ BUS	080	Business Math	3	A	none
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

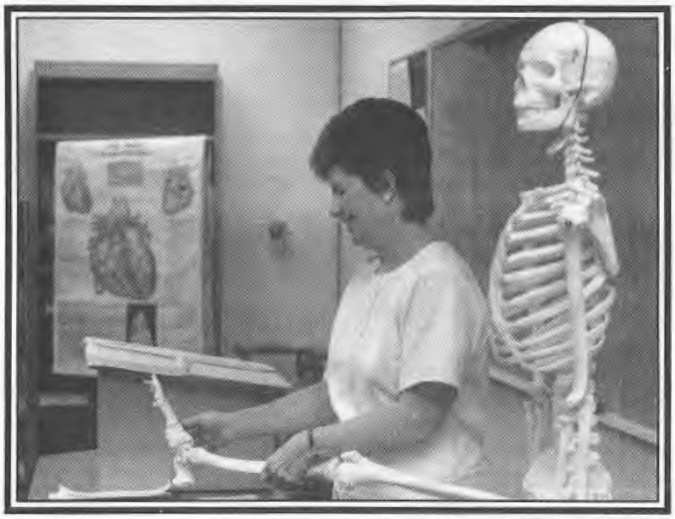
Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirement

___	BR	110	Barbering Lab	9	A	none
___	BR	111	Barbering Thry	5	A	none
___	BR	120	Barbering Lab	9	A	previous lab
___	BR	121	Barbering Thry	5	A	BR 111
___	COM	120	Prcpls Pub Spkg	4	A	none
___	COS	130	Cosmtlgy	9	A	none
___	COS	131	Cosmtlgy Thry	5	A	BR 121
___	COS	140	Cosmtlgy Lab	9	A	previous lab
___	COS	141	Cosmtlgy Thry	5	A	COS 131
___	COS	190	Color	3	F,Sp	COS 130
___	BR	150	Barbering Lab	9	A	previous lab
			or			
___	COS	150	Cosmtlgy Lab	9	A	previous lab
___	BR	151	Barbering Thry	5	A	BR 121
			or			
___	COS	151	Cosmtlgy Thry	5	A	COS 141
___	BR	160	Barbering Lab	9	A	previous lab
			or			
___	COS	160	Cosmtlgy Lab	9	A	previous lab
___	BR	161	Barbering Thry	5	A	BR 151
			or			
___	COS	161	Cosmtlgy Thry	5	A	COS 151
___	MGT	110	Sm Bus Mgt	3	F,W,Sp	none
Recommended						
___	CST	101	Customer Srv	3	A	none
Optional if additional hours are required:						
___	BR	170	Barbering Lab	9	A	previous lab
			or			
___	COS	170	Cosmtlgy Lab	9	A	previous lab
___	BR	171	Barbering Thry	5	A	BR 161
			or			
___	COS	171	Cosmtlgy Thry	5	A	COS 161

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



BIOLOGY

School of Humanities and Science

Division of Sciences

Technology Building Room 416 967-4150

Faculty

Professors: Berit Blomquist, James Hampton; *Associate Professors:* Darrell Murray; *Assistant Professors:* Emma-Jean Battles, William Tanner.

The Program

The Biology Department offers a varied curriculum of introductory biology classes. These include related science courses required by the Practical Nursing and Registered Nursing Departments at Salt Lake Community College. Students interested in pursuing the AS or AA degrees also enroll in Biology courses to fulfill general education requirements. In addition, students who wish to transfer to a four-year institution may elect to take some of the following courses as part of the AS Degree.

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

ASSOCIATE OF SCIENCE DEGREE

(Minimum 106 Credit Hours Required)

The AS Degree in Biology requires a minimum of 106 credit hours of transferable credit with a cumulative grade point average of 2.0 or better. (2.5 or better is recommended) The elective hours may be chosen to coincide with the students' chosen emphasis.

Suggested First Quarter

Courses may be taken in any order as long as prerequisite requirements are met.

Course			Cr	Taught*	Prerequisites
General Requirements (51 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
		Communications	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	111	Calculus	5	A	MTH 106 or equiv
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science					
___ BIOL	101	Gen Biology	5	A	none
___ BIOL	102	Gen Biol Lab	0	A	w/BIOL01
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (55 credits)

Required (35 credits)

___ BIOL	120	Botany	5	A	w/BIOL 121
___ BIOL	121	Botany Lab	0	A	w/BIOL 120
___ BIOL	130	Gen Zoology	5	A	w/BIOL 131
___ BIOL	131	Zoology Lab	0	A	w/BIOL 130
___ MTH	112	Calculus II	5	A	MTH 111
___ MTH	113	Calculus III	5	A	MTH 112
___ CHEM	121	Prcpl Chem I	5	F,W,Sp	MTH 105
___ CHEM	122	Prcpl Chem II	5	W,Sp	CHEM 121
___ CHEM	123	Prcpl Chem III	5	Sp	CHEM 122

___ **Electives** (take 20 hours)

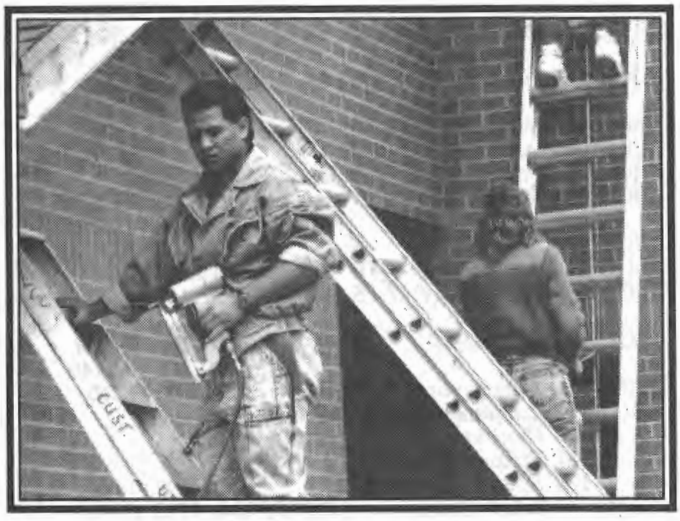
BIOL	110	Human Ecology	3	F	none
BIOL	175	Trees/Flowers	4	Su	BIOL 120 or permission
BIOL	180	Bio Fresh Water	5	Su	BIOL 101,120, or 130
BIOL	188	Ecology	5	Sp	BIOL 101 or 120 or 130
BIOL	205	Anatomy	5	A	pre-test, w/ 206
BIOL	206	Anatomy Lab	0	A	w/BIOL 205
BIOL	214	Microbiology	5	A	pre-test, w/ BIOL 215
BIOL	215	Micro Lab	0	A	w/BIOL 214
BIOL	218	Parasitology	5	W,Sp	BIOL 101 or BIOL 130
BIOL	230	Genetics	5	Sp	BIOL101, 120, or 130 CHEM 121 or 140
LS	125	Special Studies in Life Science	1-2	A	BIOL 101,120 or 130; ENG 130/ permission
PHY	101	Intro Physics	5	A	MTH 101

DEPARTMENTAL OFFERINGS

(Courses administered by the Biology Department)

Course			Cr	Taught*	Prerequisites
BIOL	101	Gen Biology	5	A	none
BIOL	102	Gen BiolLab	0	A	w/BIOL 101
BIOL	105	Anatomy/Phys	5	A	none
BIOL	110	Hum Ecology	3	F	none
BIOL	120	Botany	5	A	w/BIOL 121
BIOL	121	Botany Lab	0	A	w/BIOL 120
BIOL	130	Gen. Zoology	5	A	w/BIOL 131
BIOL	131	Zoo Lab	0	A	w/BIOL 130
BIOL	175	Trees/Flowers	4	Su	BIOL 120 or permission
BIOL	180	Bio Fresh Water	5	Su	BIOL 101,120, or 130
BIOL	188	Ecology	5	Sp	BIOL 101,120, or 130
BIOL	200	Biology COOP	3-6	A	permission
BIOL	205	Anatomy	5	A	pre-test, w/BIOL 206
BIOL	206	Anatomy Lab	0	A	w/BIOL 205
BIOL	210	Physiology	5	A	pre-test or BIOL 205, and CHEM 140
BIOL	214	Microbiology	5	A	pre-test, w/BIOL 215
BIOL	215	Micro Lab	0	A	w/BIOL 214
BIOL	218	Parasitology	5	W,Sp	BIOL 101 or BIOL 130
BIOL	230	Genetics	5	Sp	BIOL 101, 120, or 130, & CHEM 140
BIOL	290	Pathophysiol	4	F,Sp	BIOL 205 & 210
LS	105	Consumer Nutr	3	A	none
LS	110	Nutrition	3	A	none
LS	121	Personal Health	3	A	none
LS	125	Special Studies in Life Science	1-2	F,W,Sp	BIOL 101,120 or 130, ENG 130 or permission
LS	128	Alcohol/drgs	3	A	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



BUILDING CONSTRUCTION

School of Occupational Education
Division of Construction and Service Industries
Construction Trades Building Room 262 967-4074

Faculty

Professor: Wayne Paulsen; *Associate Professor:* Del Mar Stevens; *Assistant Professor:* George Billings; *Instructor:* James E. Miller

The Program

Provides training in plan reading, use of layout instruments, footing and foundations, concrete flatwork, framing layout and construction, window installation, roof framing, roofing, insulation, drywall, interior trim, paint preparation and finish. Most who enter the building trade through this program do so as carpenters, framing and finish carpenters, cabinetmakers, concrete workers, insulation or drywall applicators.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Option

With prior approval, a student working in a job related to Building Construction may earn credit toward Diploma or AAS Degree requirements. See BC 200 course descriptions for more details.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost for tools and supplies: $250
Estimated cost for books per quarter: $45

DIPLOMA

(Minimum 112 Credit Hours Required)

Day Program

Suggested First Quarter			Credits
BC	103	Residential Blueprint Reading	5
BC	112	Carpentry Technology	5
BC	116	Basic Carpentry Skills	5
BC	147	Carpentry Math I	5

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ BC	103	Rsdntl Bprint	5	F,W	none
___ BC	104	Cmrcl Bprint	5	W,Sp	BC 103 or equiv
___ BC	112	Crpntry Tech	5	F,W	none
___ BC	116	Bsc Crpntry	5	F,W	none
___ BC	123	Cabinet Dsgn	5	W,Sp	BC 112
___ BC	127	Cabinet Cnstr	5	W,Sp	BC 112,116
___ BC	133	Concrete Tech	5	Sp,Su	none
___ BC	137	Concrete F & F	7	Sp,Su	none
___ BC	147	Crpntry Math I	5	F,W	none
___ BC	148	Crpntry Math II	5	W,Sp	BC 147
___ BC	201	Cnstr Estg	5	F,W	BC 103,104
___ BC	205	Building Code	3	F,W	none
___ BC	207	Cnstr Mgt	5	W,Sp	none
___ BC	209	Cntrctr Prepn	5	F,Su	none
___ BC	210	Cnstr Cpts	5	F,Su	BC 133, 137
___ BC	214	Framing Cnstr	7	F,Su	BC 133, 137
___ BC	220	Interior Cnstr	5	F,W	BC 210, 214
___ BC	224	Interior Cnstr	5	F,W	BC 210, 214
___ BC	232	Exterior Cnstr	5	W,Sp	BC 220, 224
___ BC	236	Exterior Cnstr	7	W,Sp	BC 220,224
___ BC	261	Masonry Cpts	2	F,W	none
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	110	Org & Intpl Com	3	A	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

Evening Program

Three classes have been shortened to enable the extended day program to function. BC 137, BC 214 and BC 236 now become BC 135, BC 212 and BC 234. BC 240 is added to the curriculum to adjust for the reduced credit of these classes. This makes the day and evening programs equal.

Suggested First Quarter			Credits
BC	103	Residential Blueprint Reading	5
BC	104	Commercial Blueprint Reading	5
BC	147	Carpentry Math I	5
BC	148	Carpentry Math II	5

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ BC	103	Rsdntl Bprint	5	F,W	none
___ BC	104	Cmrcl Bprint	5	W,Sp	BC 103 or equiv
___ BC	112	Crpntry Tech	5	F,W	none
___ BC	116	Bsc Crpntry	5	F,W	none
___ BC	123	Cabinet Dsgn	5	W,Sp	BC 112
___ BC	127	Cabinet Cnstr	5	W,Sp	BC 112,116
___ BC	133	Concrete Tech	5	Sp,Su	none
___ BC	135	Concrete F & F	5	Sp,Su	none
___ BC	147	Crpntry Math I	5	F,W	none
___ BC	148	Crpntry Math II	5	W,Sp	BC 147
___ BC	201	Cnstr Estg	5	F,W	BC 103,104
___ BC	205	Building Code	3	F,W	none
___ BC	207	Cnstr Mgt	5	W,Sp	none
___ BC	209	Cntrctr Prep	5	F,Su	none
___ BC	210	Cnstr Cpts	5	F,Su	BC 133, 137
___ BC	212	Framing Cnstr	5	F,Su	BC 133, 137
___ BC	220	Interior Cnstr	5	F,W	BC 210,214
___ BC	224	Interior Cnstr	5	F,W	BC 210, 214
___ BC	232	Exterior Cnstr	5	W,Sp	BC 220, 224

___	BC	232	Exterior Cnstr	5	W,Sp	BC 220, 224
___	BC	240	Cnstr Splts	5	TBA	BC 220, 224
___	BC	261	Masonry Cpts	2	F,W	none
___	CL	101	Bsc Cmptr Cpts	3	A	none
___	COM	110	Org & Intpl Com	3	A	none

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 133 Credit Hours Required)

Suggested First Quarter			Credits
BC	103	Residential Blueprint Reading	5
BC	112	Carpentry Technology	5
BC	116	Basic Carpentry Skills	5
BC	147	Carpentry Math I	5

Course				Cr	Taught*	Prerequisites
General Requirements (27 credits)						
Core Academic Skills						
___	CL	101	Bsc Cmptr Cpts	3	A	none
___	COM	110	Org & Intpl Com	3	A	variable
___	ENG	101	English Comp	4	A	pre-test
___	Math (determined by dept)				A	variable
___	Reading level (determined by dept)					
General Education						
___	Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (106 credits)

___	BC	103	Rsdntl Bprint	5	F,W	none
___	BC	104	Cmrcl Bprint	5	W,Sp	BC 103 or equiv
___	BC	112	Crpntry Tech	5	F,W	none
___	BC	116	Bsc Crpntry	5	F,W	none
___	BC	123	Cabinet Dsgn	5	W,Sp	BC 112
___	BC	127	Cabinet Cnstr	5	W,Sp	BC 112, 116
___	BC	133	Concrete Tech	5	Sp,Su	none
___	BC	137	Concrete F & F	7	Sp,Su	none
___	BC	147	Crpntry Math I	5	F,W	none
___	BC	148	Crpntry Math II	5	W,Sp	BC 147
___	BC	201	Cnstr Estg	5	F,W	BC 103,104
___	BC	205	Building Code	3	F,W	none
___	BC	207	Cnstr Mgt	5	W,Sp	none
___	BC	209	Cntrctr Prepn	5	F, Su	none
___	BC	210	Cnstr Cpts	5	F,Su	BC 133, 137
___	BC	214	Framing Cnstr	7	F,Su	BC 133, 137
___	BC	220	Interior Cnstr	5	F,W	BC 210, 214
___	BC	224	Interior Cnstr	5	F,W	BC 210, 214
___	BC	232	Exterior Cnstr	5	W,Sp	BC 220, 224
___	BC	236	Exterior Cnstr	7	W,Sp	BC 220, 224
___	BC	261	Masonry Cpts	2	F,W	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

BUILDING CONSTRUCTION

Suggested First Quarter

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. *The hours completed do not apply toward other college programs.*

General Information

Training includes: Plan reading, layout, footings and foundations, concrete flatwork, framing layout, hand and power tools and computers.

Special Requirements

Good physical condition and above average eye-hand coordination.

Job Information

Provides employment potential in carpentry, framing, concrete work, insulation and drywall.

Courses	Hours
Residential Blueprint Reading	50
Basic Carpentry Skills	150
Commercial Blueprint Reading	50
Carpentry Math I and II	100
Concrete Theory & Lab	250
Framing Construction Theory & Lab	250
Carpentry Technology	50
Job Club	60
Total Hours	**960**

FLEXIBLE ENROLLMENT PROGRAM

The Building Construction program is divided into competency-based 4 - 9 modules per class. After completing individualized prerequisite modules, students may enroll for any one module or combination of modules to gain specific skills. These modules are offered for credit/non-credit. For further information please contact Julie Hoelle at 967-4097 or the Department Coordinator, Construction Trades Building room 222.

PLEASE NOTE: The Flexible Enrollment Program is offered in addition to the full quarter requirements for the diploma or degree.

BUSINESS MANAGEMENT

School of Business and Technology
Division of Business Systems
Business Building Room 105 967-4325

Faculty

Professors: Kathryn C. Beebe, Bob Cox; *Associate Professor:* Durant Black; *Assistant Professors:* Kim Richardson, Lynn Suksdorf; *Instructors:* Bob Foster, Don Gren

The Program

Business Management is a diversified field involved in many facets of business and public service. Emphasis is given to problem solving and decision making to prepare the graduate with decision skills for a variety of career areas. ***If students desire to transfer to a four-year college they should pursue the Associate of Science Degree.***

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program. The classes designed to assist students in reaching the skill level necessary to enter the certificate and degree programs are: BUS 080 (Business Math), BUS 101 (Business English), CIS 102 (Computer Information Systems), MTH 101 (Intermediate Algebra), OIS 108 (WordPerfect for Non-OIS Majors). Any class in the preparatory skills may be waived if the student can demonstrate equivalent skill.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. Credit earned from MGT 200 is applied toward graduation requirements as Business Elective credit.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply costs: $125-$150 per quarter.

CERTIFICATE

(Minimum 52 Credit Hours Required)

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	101	Introduction to Business	4

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ ACCT	101	Elem Acct I	4	A	FIN 138 or w/FIN 138
___ ACCT	102	Elem Acct II	4	A	ACCT 101,FIN 138
___ BUS	115	Bus Com	3	A	BUS 101, ENG 101
___ CIS	140	Bus Cmptr Apl	3	A	ACCT 101
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	Eng Comp	4	A	pre-test
___ FIN	120	Prsnl Finance	4	A	none
___ FIN	138	Fin Math	5	A	pre-test
___ MGT	101	Intro to Bus	4	A	none
___ MGT	160	Prcpl of Supv	5	A	none
___ MGT	205	Lgl Envr Bus	5	A	none
___ MKTG	103	Intro to Mrktg	5	A	none
___ TRM	101	Intro Dist Sys	3	A	none
___					

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 107 Credit Hours Required)

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	101	Introduction to Business	4

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ FIN	138	Fin Math	5	A	pre-test
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science	Physical Science
Humanities	Social Science

(See pages 11 & 12 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (78 credits)

___	ACCT	101	Elem Acct I	4	A	FIN 138orw/FIN 138
___	ACCT	102	Elem Acct II	4	A	ACCT 101, FIN 138
___	ACCT	203	Mgrl Acct	4	A	ACCT 102
___	BUS	115	Bus Com	3	A	BUS 101, ENG 101
___	BUS	230	Bus Rpt Wrtg	3	F,W,Sp	BUS 115
___	CIS	140	Bus Cmptr Apl	3	A	ACCT 101. CIS 102
___	ECN	201	Macro Ecn	4	A	MGT 101
___	FIN	120	Prsnl Finance	4	A	none
___	MGT	101	Intr to Bus	4	A	none
___	MGT	160	Prcpl of Supv	5	A	none
___	MGT	202	Entrprn	5	F,Sp	ACCT101,MGT101
___	MGT	205	Lgl Envr Bus	5	A	none
___	MGT	207	Prsnl Lbr Rel	4	F,Sp	MGT 101
___	MGT	220	Bus Stat I	4	A	MGT 101, MTH 101
___	MGT	230	Bus Stat II	4	A	MGT 220, MTH 105
___	MGT	250	Prcpl of Mgt	5	W,Sp	BUS 115, MGT 160
___	MKTG	103	Intro to Mrktg	5	A	none
___	MTH	105	Col Algebra	5	A	MTH 101
___	TRM	101	Intro Dist Sys	3	A	none

___ **Electives**

BUS	190	(DEX)	1-3	TBA	none
BUS	191	(PBL)	1	TBA	none
BUS	192	(Toastmasters)	1	TBA	none
BUS	215	Calc for Bus	4	A	MTH 105
FIN	221	Credit and Col	4	A	ACCT101,MGT101
MGT	200	Mgt CO-OP	3-6	A	Soph & permission
MGT	225	Prod Mgt	4	W,Sp	MGT 101, MGT 220
MGT	240	Intnl Trade Bus	4	F,Sp	ECN 201, MGT 101
MGT	299	Crt Tpcs Mgt	1-5	TBA	variable

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF SCIENCE DEGREE

(Minimum 97 Credit Hours Required)

Students desiring to transfer to four-year colleges should pursue this degree.

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	105	Business Law I	5

Course			Cr	Taught*	Prerequisites
General Requirements (52 credits)					
Core Academic Skills					
___ CIS	102	CIS Intro	4	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

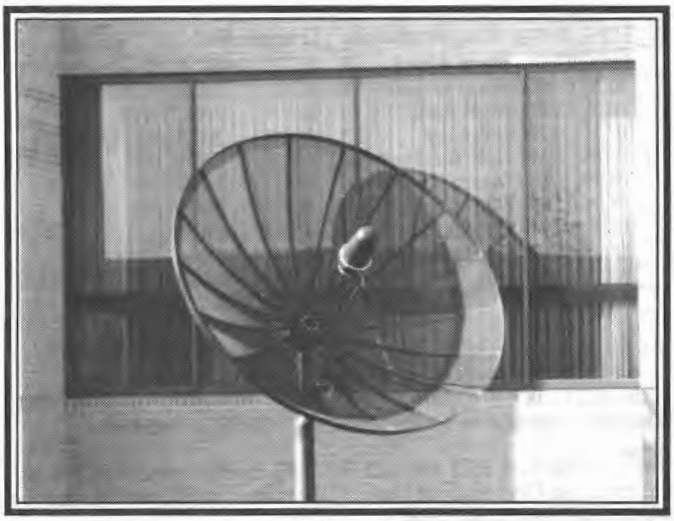
Major Course Requirements (45 credits)

___	ACCT	101	Elem Acct I	4	A	BUS 138 or w/FIN 138
___	ACCT	102	Elem Acct II	4	A	ACCT 101, FIN 138
___	ACCT	203	Mgrl Acct	4	A	ACCT 102
___	BUS	115	Bus Com	3	A	BUS 101, ENG 101
___	BUS	215	Calc for Bus* *	4	A	MTH 105
___	ECN	201	Macro Ecn	4	A	MGT 101
___	ECN	202	Micro Ecn	4	A	MGT 101
___	FIN	138	Fin Math	5	A	pre-test
___	MGT	205	Lgl Envr Bus	5	A	none
___	MGT	220	Bus Statistics I	4	A	MGT 101, MTH 101
___	MGT	230	Bus Statistics II	4	A	MGT 220, MTH 105

**A*= All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

** BUS 215 is not required for Business Education and Marketing Education majors at some four-year universities and colleges.

☞ COM 120, PSY 101 and SOC 101 are recommended if transferring to the University of Utah. (One course in philosophy must be taken after transferring there.)



COMMUNICATION

School of Humanities and Sciences
Division of Health & Human Services
Technology Building Room 316A 967-4124

Faculty

Professor: Loretta Walker; *Associate Professor:* Roselyn Kirk

The Program

The department offers courses in speech communication, broadcasting, journalism, and American Sign Language as well as a two-year AS degree for students who wish to transfer to a four-year program.

COMMUNICATION

Communication classes range from the basic introductory courses to specialized classes which focus on dyadic, group, public, and mass media contexts for human communication. Within those contexts, informative, persuasive, interviewing, newswriting, problem-solving, relational, and manual communication skills are developed.

In COM 131 students learn fundamentals of television production and in COM 132 and 133 actually produce videos for CCIN, the college television network.

In COM 140, 141, and 142 students learn the essentials of American Sign Language in preparation for training as interpreters for the deaf.

JOURNALISM

The journalism classes introduce students to the basics of print communication. In JRN 101, 102, and 103 students study newspaper writing and production, becoming HORIZON (the school newspaper) staff members.

Books and Supplies

Cost for supplies and texts are comparable with other general education classes at approximately $30 per text.

ASSOCIATE OF SCIENCE DEGREE

(Minimum 96 Credit Hours Required)

The AS Degree in Communication requires a minimum of 96 credit hours of transferable credit with a cumulative grade point average of 2.0 or better (2.5 or better is recommended). The elective hours may be selected to emphasize the student's interest area in communication.

Suggested First Quarter
Courses may be taken in any order as long as prerequisite requirements are met.

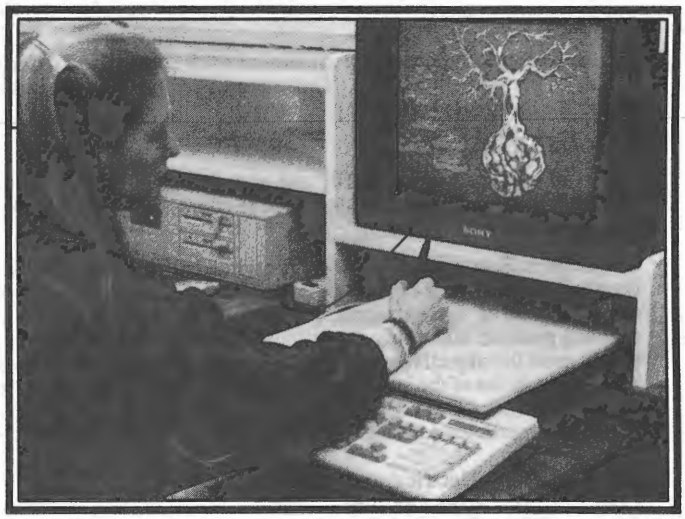
Course			Cr	Taught*	Prerequisites
General Requirements (51 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
or					
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
(any INT course except COM 150)					
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (45 credits)					
Required (29 credits)					
___ COM	120	Public Speaking	4	A	none
___ COM	122	Sml Grp Com	4	Sp	COM 101or 110
___ COM	150	Mass Com	5	A	none
___ COM	171	Wrtg Mass Med	4	F,W,Sp	ENG 101
___ COM	211	Interpers Com	4	F	COM 101 or 110
___ COM	213	Interviewing	4	W	COM 101 or 110
___ COM	220	Intm Pub Spkg	4	Sp	COM 120
___ **Electives** (Choose minimum of 16 hours from one track)					
Broadcasting					
COM	131	Basic TV Prod	3	A	COM 120, JRN 101
COM	132	TV Prod II	3	A	COM 131
COM	133	TV Prod III	3	A	COM 131, 132
COM	200	CO-OP Ed	3-6	A	COM 110, 120&131 or JRN 101
GD	104	Bsc Phtgrphy	3	A	none
SOC	101	Intro to Soc	5	A	none
Languages					
Theater					
Journalism					
ENG	130	Technical Wrtg	4	A	ENG 101
GD	101	Phot Gph Dsgn	2	F,W	none
GD	104	Bsc Phtgrphy	3	A	none
GD	122	Layout I	2	Sp,Su	GD 135
GD	230	Layout II	3	W	GD 122
GD	252	Adv Layout	3	W	GD 230
GD	268	Advrtsng Thry	3	Sp	Soph Status
JRN	101	Journalism I	3	F,W,Sp	ENG 101
JRN	102	Journalism II	3	F,W,Sp	JRN 101
JRN	103	Journalism III	3	F,W,Sp	JRN 102
JRN	200	JRN CO-OP Ed	3-6	A	Soph Status, perm
OIS	225	Desktop Pub	5	W,Sp,Su	OIS 112, 140 ,212
Languages					

Speech Communication					
COM	140	Am Sign Lang I	3	A	none
COM	141	Am Sign L II	3	F,W,Sp	COM 140
COM	142	Am Sign L III	3	W,Sp,Su	COM 141
CST	101	Customer Serv	3	A	none
ECD	121	Family Rel	5	Sp	none
MKTG	103	Prcpl of Mktg	5	A	none
MKTG	107	Promotion	5	F,W	MKTG 103
POLI	102	Grp Dec Making	3	F,W,Sp	none
PSY	101	General Psy	5	A	none
PSY	140	Prsnl Grth Dev	3	F,W,Sp	none
PSY	150	Hmn Grth Dev	5	A	none
SOC	101	Intro to Soc	5	A	none
Languages					

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



COMPUTER AIDED DRAFTING & DESIGN

School of Business and Technology
Division of Technology
Metal Trades Building Room 228 967-4098

Faculty

Professor: Sherwood L. Davis; *Associate Professors:* Thomas R. Ellison, David L. Webb; *Instructor:* Jane Hook

The Program

The Computer Aided Drafting and Design program is fully certified by the American Institute of Design and Drafting (AIDD) Computer-aided Design (CAD) facilities at Salt Lake Community College are among the most modern and complete within the Intermountain region. CAD courses are offered on a range of equipment from mainframe VAX 11/785, using high resolution Lexidata color monitors, to IBM PC terminals. SLCC boasts being the training center for CAD software, such as DOGS (Design Oriented Graphics System), AutoCAD, CADKEY, and others. Software systems include 2-D, 3-D, surfacing, and Solids Modeling.

Career Opportunities

Computer Aided Drafting and Design AAS & AS graduates are qualified with entrance level skills in a number of drafting fields: mechanical, structural, electrical and electronics, civil and piping. Offerings in computer-aided drafting include programming in BASIC, introduction to computer-aided drafting, advanced computer graphics, and CAD Design Systems. Graduates, after gaining experience, may reasonably expect advancements into positions such as design checking, engineering design, and supervision. Industrial competition for world markets has accelerated technological progress in product refinement and stimulated scores of entirely new concepts in product development. It is this competition and the consequent need for progressive design that has increased the demand for qualified drafting personnel. The technician today must demonstrate capabilities in geometry, algebra, trigonometry, mechanics, strength of materials, basic physics, and verbal skills.

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete a degree. ASSET testing will be done upon entry to the college unless the student has had prior college-level experience.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Cooperative Education credit may be earned in lieu of the laboratory classes for completion of AAS degree requirements. To earn CO-OP credit for one of these courses, the student must be employed in a drafting position and doing essentially the same work on the job as would meet the objectives of the laboratory class on campus. Prior to enrollment in one of the lab courses, permission must be obtained from the CAD faculty CO-OP coordinator. The following courses are eligible for participation as CO-OP courses.

CD	218	Electrical and Electronic Drawing
CD	219	Civil Drafting
CD	227	Structural Detailing
CD	236	Pipe Drafting
CD	237	Design Project

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

First year - $340 Second year - $245

CERTIFICATE

(51 Credit Hours Required)

Suggested First Quarter			Credits
CD	113	Drafting Fundamentals	5
MTH	105	College Algebra	5
CIS	102	Computer Information Systems - Introduction	4

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ CD	113	Draft Fdmt	5	A	none
___ CD	124	Dscrp Geom	5	A	CD 113
___ CD	130	CAD G&P	3	A	CIS 102 or equiv
___ CD	140	AutoCAD	3	A	CD 113
___ CD	133	Engr Drawing	5	A	CD 113 & CD 140
___ CD	234	Mftg Proc	5	Sp	none
___ CIS	102	CIS Intro	4	A	none
___ COM	110	Communication	3	A	none
___ ENG	101	Eng Comp	4	A	pre-test
___ ENG	130	Tech Wrtg	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ MTH	106	Plane Trig	5	A	MTH 105

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

☞ Second year courses will be taught on a demand basis in the evening program. Drafting requirements may be waived for previous experience. The student must take a placement test for this evaluation.

ASSOCIATE OF APPLIED SCIENCE DEGREE

(117 Credit Hours Required)

Suggested First Quarter			Credits
CD	113	Drafting Fundamentals	5
CD	140	AutoCAD	3
COM	110	Organizational and Interpersonal Com.	3
MTH	105	College Algebra	5

Course			Cr	Taught*	Prerequisites
General Requirements					
Core Academic Skills (38 credits)					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	130	Tech Wrtg	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ MTH	106	Plane Trig	5	A	MTH 105
___ Reading	(determined by dept)			A	variable
General Education					
___ Interdisciplinary Course			5	A	variable

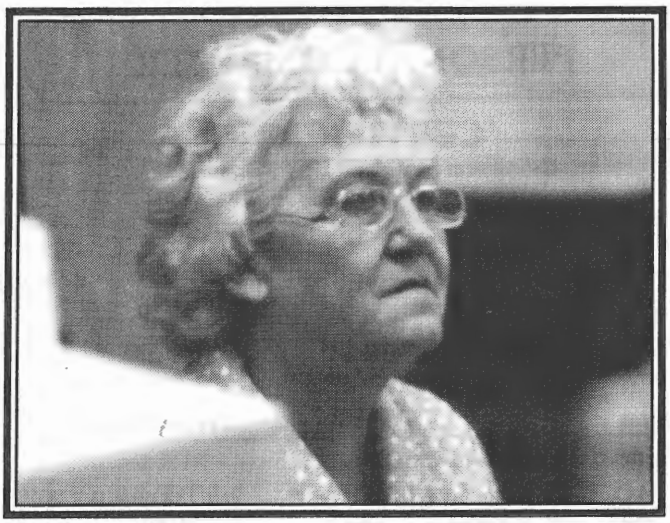
___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science	Physical Science
Humanities	Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (79 credits)					
___ CD	113	Draft Fdmt	5	A	none
___ CD	124	Dscrp Geom	5	A	CD 113
___ CD	130	CAD Graphics	3	A	CIS 102 or equiv.
___ CD	133	Engr Drawing	5	A	CD 113, CD 140
___ CD	140	AutoCAD	3	A	CD 113
___ CD	216	Strgth Mtrls	5	F,Sp	MTH 106
___ CD	218	Elc /Elctrn Dr	5	W	CD 133, CD 140
___ CD	219	Civil Drafting	5	Sp	CD 113, CD 140
___ CD	224	Steel Design	5	W	CD 133, 140, 216
___ CD	226	Mach Dsgn	5	W	CD 133, CD 216
___ CD	227	Struc Detail	2	W	CD 133 & w/CD 224
___ CD	234	Mftg Proc	5	Sp	none
___ CD	237	Design Draft	5	Sp	CD 226, 227, 218
___ CD	240	Adv Graphics	5	F	CD 130, CD 140
___ CD	254	Geom Dim Tol	3	F	CD 133
___ CD	260	Design Systems	3	W,Sp	CD 140
___ CIS	102	Intro to CIS	4	A	none
___ CL	130	Prg in BASIC	3	A	MTH 101 or equiv
___ **Choose one of the following:**					
CD	217	Tech Illust	3	Sp	CD 113, CD 140
CD	236	Pipe Drafting	3	F	CD 113, CD 140

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable



COMPUTER INFORMATION SYSTEMS

School of Business and Technology
Division of Technology
Metal Trades Building Room 228A 967-4098

Faculty
Associate Professors: Gordon Frisbey, Larry Egelund; *Assistant Professor:* Michael Beddoes

The Program

The Computer Information Systems program prepares students for professional careers as commercial programmers and programmer/designers. They are trained to perform detailed program design, coding, testing, documentation and information implementation of commercially oriented information systems.

Preparation Note

ASSET testing will be done upon entry into the college unless the students has prior college-level experience. A.S. Students who need to take preparatory classes to meet the requirements of first quarter courses should plan on extra time to complete program. Before entering this program, students must pass CIS 102 or show equivalent competencies. Students must complete CIS 105 and CIS 112 with a 3.0 average. In addition students must maintain a 2.5 cumulative grade point average in all courses. Students who do not maintain a 2.5 cumulative grade point average may not continue in the program without approval of the division chair. Grades less than a C (2.0) will not be credited toward graduation.

☞ Computer Information Systems requires an ability to type at least 35 net words per minute.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. Credit earned from CIS 200 is applied toward graduation requirements as CIS elective credit.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $120 - $145 per quarter

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 124 Credit Hours Required)

Suggested First Quarter			Credits
BUS	101	Business English	3
CIS	112	Intro to CIS	5
FIN	138	Financial Math	5
MGT	101	Introduction to Business	4

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ MTH	105	Col Algebra	5	A	MTH 101
___ Reading		(determined by dept)		A	variable
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (95 credits)
Required (85 credits)

___ ACCT	101	Elem Acct I	4	A	w/FIN 138
___ ACCT	102	Elem Acct II	4	A	ACCT 101, FIN 138
___ ACCT	203	Mgrl Acct	4	A	ACCT 102
___ AST	240	Telecom	5	W	permission
___ BUS	101	Bus English	3	A	none
___ BUS	115	Bus Writing	3	A	BUS 101, ENG 101
___ CIS	102	CIS Intro	4	A	none
___ CIS	105	Lgc Prob Solv	5	A	CIS 102 or equiv
___ CIS	111	BASIC Prg	5	F	CIS 105, FIN 138
___ CIS	118	Strct Prg/Sys D	5	A	CIS 111 or CIS 112
___ CIS	120	COBOL Prg	5	F,W	CIS 111, or CIS 112, CIS 118, FIN 138
___ CIS	215	Cmptr Org	5	W,Sp	CIS 111, or CIS 112
___ CIS	220	Adv COBOL	5	W,Sp	CIS 120
___ CIS	240	MIS	5	F	CIS 111 or 112, ACCT 101, MGT 101
___ CIS	260	Fdmt Dt Bs Mgt	5	F,W	CIS 111 or CIS 112
___ CIS	280	Bus Dsgn	5	Sp	CIS 220
___ ENG	130	Tech Wrtg	4	A	ENG 101
___ FIN	138	Fin Math	5	A	pre-test or BUS 080
___ MGT	101	Intro to Bus	4	A	none

___ **Electives** (take 10 credits)

CIS	112	PASCAL Pgm	5	A	CIS 105, FIN 138
CIS	114	RPG	5	F,Sp	CIS 105 or IND exp
CIS	115	Assmblr Prg	5	Sp	CIS 111 or CIS 112
CIS	135	IBM OS/Job	5	Sp	CIS 111 or CIS 112
CIS	140	Bus Cmptr Apl	3	A	ACCT 101
CIS	141	Adv LOTUS	3	A	CIS 140
CIS	145	Accnt's Comptr	3	A	ACCT 102
CIS	190	(DPMA)	1	F,W,Sp	none
CIS	200	CIS COOP	3-6	A	Soph & perm
CIS	270	C-Lang Prg	5	F,Sp	CIS 111 or CIS 112
CIS	299	Crt Tpcs CIS	1-5	TBA	variable

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF SCIENCE DEGREE

(Minimum 125 Credit Hours Required)

Suggested First Quarter			Credits
BUS	101	Business English	3
CIS	102	Introduction to CIS	4
MGT	101	Introduction to Business	4
MTH	105	College Algebra	5
PE		Physical Education	1

Course			Cr	Taught*	Prerequisites
General Requirements (44 credits)					
Core Academic Skills					
___ COM	120	Prcpl Pub Spk	4	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
___ LS	121	Life Science	3	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (81 credits)

___ ACCT	101	Elem Acct I	4	A	FIN 138 or w/138
___ ACCT	102	Elem Acct II	4	A	ACCT 101, FIN 138
___ AST	240	Telecomm	5	W	permission
___ BUS	101	Bus English	3	A	none
___ BUS	115	Bus Writing	3	A	BUS 101, ENG 101
___ BUS	215	Calc for Bus	4	A	MTH 105
___ CIS	102	CIS Intro	4	A	none
___ CIS	105	Lgc Prob Solv	5	A	CIS 102 or equiv
___ CIS	111	BASIC Prg	4	A	CIS 105, FIN 138
___ CIS	112	PASCAL	5	A	CIS 105, FIN 138
___ CIS	118	Strct Prg/Sys D	5	A	CIS 111 or CIS 112
___ CIS	120	COBOL Prg	5	F,W	CIS 111, or CIS 112, CIS 118, FIN 138
___ CIS	135	IBM OS/Job	5	Sp	CIS 111 or CIS 112
___ CIS	140	Bus Cmptr Apl	3	A	ACCT 101
___ CIS	220	Adv COBOL	5	W,Sp	CIS 120
___ CIS	240	MIS	5	F	CIS 111 or 112, ACCT 101, MGT 101
___ ECN	201	Macro Ecn	4	A	MGT 101
___ ECN	202	Micro Ecn	4	A	MGT 101
___ MGT	101	Intro to Bus	4	A	none

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

PERSONAL COMPUTER

CERTIFICATE

(Minimum 516Credit Hours Required)

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting	4
BUS	101	Business English	3
CIS	102	Introduction to CIS	4
CIS	130	Business Presentation	3

Course			Cr	Taught*	Prerequisites
Major Course Requirements (56)					
___ ACCT	101	Accounting I	4	A	FIN 138 or with 138
___ AST	240	Telecom	4	W	permission
___ BUS	101	Bus English	3	A	none
___ CIS	102	CIS Intro	4	A	none
___ CIS	105	Logic & P/S	5	A	CIS 102 or equiv
___ CIS	112	PASCAL	5	A	CIS 105, FIN 138
___ CIS	130	Presentations	3	A	none
___ CIS	140	Bus Comptr Apl	3	A	ACCT 101, CIS 102
___ CIS	141	Adv LOTUS	3	A	CIS 140
___ CIS	150	PC DOS	3	F,W	CIS 102
___ CIS	155	PC DataBase IV	3	A	CIS 102
___ CIS	165	PC Assembler	3	W	CIS 102
___ CIS	185	PC S/I&Set-Up	3	F,W	CIS 102
___ FIN	138	Financial Math	5	A	BUS 080 or equiv
___ PHIL	110	Psnl Ethics**	5	A	none

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

** Check current Class Schedule (trial offering)

COMPUTER SCIENCE TECHNOLOGY

School of Humanities and Sciences
Division of Sciences
Technology Building Room 416 967-4150

Faculty

Assistant Professors: Bruce Brown, Graham Stork; *Instructors:* Nick Safai, Richard Warnock

The Program

The Computer Science Technology Program leads to an AS Degree. It is designed to satisfy the general requirements for the first two years of a Baccalaureate of Science Degree in Computer Science. Graduates would be prepared to advise and direct the implementation and application of new computer technology to solve problems related to science, engineering, and industry. The program provides practical applications and theoretical foundations in digital & processor logic, computer organization, hardware, software interface, and software engineering. Training includes: computer literacy; PASCAL, C, FORTRAN, and assembler programming; basic & digital electronics; computer organization; algorithms; and related general education.

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program. A high school curriculum emphasizing mathematics, sciences, and communication skills is highly recommended. Those wishing to enter this program should be prepared to take MTH 106 and ENG 101.

Career Opportunities

This program prepares the students as scientific and systems programmers. The job outlook is encouraging and will improve in the near future.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of Advisor and/or Division Chair.

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. With prior approval, a student working in a job related to Computer Science may earn up to six hours of Cooperative Education credit. See CS 200 course description for more details.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $100 - $150 per quarter.

ASSOCIATE OF SCIENCE DEGREE

(Minimum 103 Credit Hours Required)

Suggested First Quarter

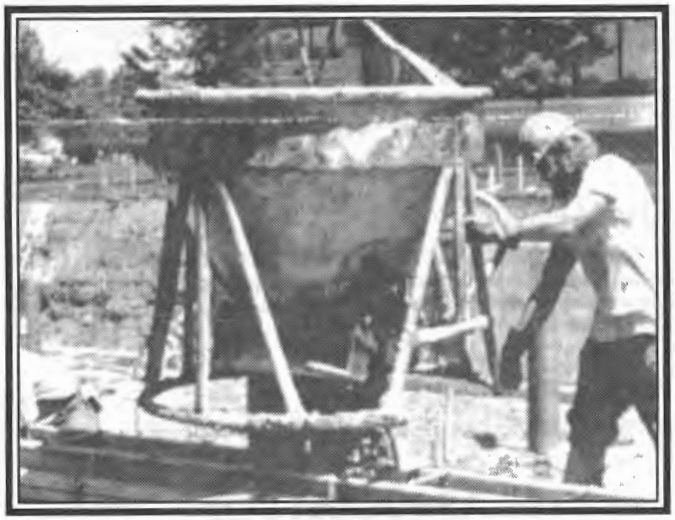
ENGR	101	Introduction to Engineering I	3
HU		Humanities Elective	3
ENG	101	English Composition	4
MTH	106	Plane Trigonometry	5
PE		Physical Education Elective	2

Course			Cr	Taught*	Prerequisites
General Requirements (52 credits)					
Core Academic Skills					
___ CS	150	Pascal Prog	4	F,W,Sp	ENGR 101
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	130	Technical Wrtg	4	A	ENG 101
___ MTH	106	Plane Trig	5	A	MTH 105
___ PE		Physical Educ	2	A	none
American Institutions					
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (51 credits)					
Computer Science Core					
___ CS	151	Algo Data Str	4	Sp	CS 150
___ CS	180	C Language	4	A	CS 150
___ CS	215	Asmbl Prg	4	W	CS 151 or perm
___ CS	231	Discrete Struc	4	F	CS 151, MTH 101
___ CS	243	Cmptr Arch I	4	W	CS 150, EE 210
___ CS	280	Cmptr Arch II	4	Sp	CS 243
___ EE	210	Intro Dgtl Sys	4	F,Sp,Su	MTH 105
___ ENGR	101	Intro Engr I	3	F,W	CL 101, w/MTH 106
Science Core					
___ MTH	111	Calculus I	5	A	MTH 106
___ MTH	112	Calculus II	5	A	MTH 111
___ MTH	113	Calculus III	5	A	MTH 112
___ PHY	171	Engr Phy I	4	F,W	MTH 111
___ PHY	181	Engr Phy I lab	1	A	w/PHY 171

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



CONCRETE TECHNOLOGY

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 254 967-4201

Director: George Van De Water

The Program

☞ This is a proposed program in process of development and review.

The Concrete Technology Certificate Program is a four quarter program that examines such areas as concrete production, transportation and application, concrete sales, quality control, field testing, rebar inspection, soils and aggregates, and blueprint and plan reading.

Students learn to perform the basic testing techniques to ensure structural integrity.

Students completing the program will receive a Certificate of Completion and will be eligible for the American Concrete Institute Inspectors Test.

Preparation Note

Students who need to take preparatory classes to meet requirements of First Quarter courses should plan on extra time to complete the program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost for the training is TBA.

CERTIFICATE

(56 Credit Hours Required)

Suggested First Quarter

CONC 111 Basic Concrete	4
CONC 112 Concrete Prod	4
CONC 113 Rebar Inspec	4
CONC 114 Plan Read/Com	5

Course	Cr	Taught*	Prerequisites
Major Course Requirements (48 credits)			
___ CONC 111 Basic Concrete	4	A	none
___ CONC 112 Concrete Prod	4	TBA	none
___ CONC 113 Rebar Inspec	4	TBA	none
___ CONC 114 Plan Read/Com	5	TBA	CONC 111/112
___ CONC 121 Reinf Concrete	5	TBA	CONC 113
___ CONC 122 Cncrt Mix Dsgn	5	A	CONC 111
___ CONC 123 Pre & Post Tens	4	TBA	CONC 121
___ CONC 211 Cncrt Transp	4	TBA	CONC 112
___ CONC 212 Cncrt Insp Cds	3	TBA	*all preceding courses or perm*
___ CONC 213 Fld Tst Cncrt C	5	F,Sp,Su	CONC 112
___ CONC 214 Quality Control	5	TBA	CONC 113
___ **Electives** (take 8 credits)			
CONC 115 Soils Aggrgts	5	TBA	none
CONC 116 Asphalt Constr	5	TBA	none
CONC 117 Cncrt for Constr	4	TBA	none
CONC 215 Cncrt Slsprsn	4	TBA	none
CONC 216 Spl Stds - Spec	4	TBA	none

CRIMINAL JUSTICE

School of Humanities and Sciences
Division of Health & Human Services
Administration Building Room 238 967-4130

Faculty

Assistant Professor: Glenn Meyerrose

The Program

Criminal Justice agencies in the recent past have established advanced academic standards. Education is becoming a more meaningful factor in the selection of law enforcement, corrections, and security personnel for initial employment, promotion and for administrative roles.

The Criminal Justice program is designed to provide students with a basic liberal education as well as offering students professional education in Criminal Justice. The program articulates with both the Utah State Police Academy and Weber State College. Individuals who successfully complete the certification course at the Police Academy will be granted credit towards completion of the college program.

Two degrees are offered in the program: a two-year AAS; and a two-year AS degree for students who plan to transfer to a four-year program. Students should check with an advisor in selection of General Education and electives to coordinate with the appropriate career track at the transfer institution. *Individuals who successfully complete the requirements for the Associate of Applied Science degree may transfer their law enforcement credit hours and their general education credits to Weber State College in order to pursue the bachelor's degree. It will be necessary, however, to complete the additional general education and electives listed for the AS degree before junior status may be obtained.*

Preparation

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Thirty-three credit hours of Vocational-Technical credit may be awarded to those individuals who successfully complete the 450 clock-hour training course offered at the Police Academy or another accredited institution. (Nine of these are transferable to Weber's four-year program.)

- OR -

Up to sixteen credit hours of Vocational-Technical credit may be awarded to those individuals who successfully complete the 170 clock-hour course for Law Enforcement Officer Certification Training (Category II/III). (Four of these are transferable to Weber's four-year program.)

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost of books and supplies: $950

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 96 Credit Hours Required)

Suggested First Quarter			Credits
CJ	101	Criminal Justice	5
CL	101	Basic Computer Concepts	3
ENG	101	English Composition	4
PSY	101	Introduction to Psychology	5

Course			Cr	Taught*	Prerequisites
General Requirements (28 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	Eng Comp	4	A	pre-test
___ FIN	120	Prsnl Finance	4	A	none
___ PSY	101	Gen Psy**	5	A	non
General Education					
___ Interdisciplinary Course (any INT course except COM 150)			5	A	variable
___ Choose an additional 7 hours from at least two of the following general education areas: Biological Science, Humanities, Physical Science, ** fills Social Science area					
(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)					
Major Course Requirements (17 credits)					
___ CJ	101	Crim Justice	5	A	none
___ CJ	133	Crim Law	3	A	CJ 101
___ CJ	134	Crim Invest I	3	A	ENG 101, COM 110, & CJ 101
___ CJ	135	Criminalistics	3	A	None
___ CJ	235	Laws Evidence	3	W	CJ 133 or perm
___ **Electives** (take 51 credits)					
CJ	125	Spec Studies	1-33	A	none
CJ	139	Police Traf Srv	3	Su	none
CJ	200	CJ CO-OP	3-6	A	CJ 101, 133, 134, 135 & 235 or perm
CJ	211	Security Mgt	3	F,W	none
CJ	212	Retail Security	3	W,Sp	none
CJ	213	Cmptr Security	3	F	none
CJ	234	Crim Invest II	3	Sp	CJ 134 or perm
CJ	236	Jvnl Law Prcd	3	W	CJ 133 or perm
CJ	239	Traffic Law	3	Sp	none
CJ	292	Crs Wrkps Sem	1-6	A	none
CL	101	Bsc Cmptr Cpts	3	A	none
COM	120	Pub. Speaking	4	A	none
ENG	130	Tech. Writing	4	A	ENG 101
LS	128	Alcohol/Drgs	3	A	none
POLI	111	State/Lol Gov	5	Sp	none
SOC	101	Intro to Soc	5	A	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF SCIENCE DEGREE

(Minimum 96 Credit Hours Required)

Suggested First Quarter			Credits
CJ	101	Criminal Justice	5
CL	101	Basic Computer Concepts	3
ENG	101	English Composition	4
PSY	101	Introduction to Psychology	5

Course			Cr	Taught*	Prerequisites
General Requirements (51 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ or	5	A	none
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course (any Interdisciplinary except COM 150)					
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (17 credits)					
___ CJ	101	Crim Justice	5	A	none
___ CJ	133	Crim Law	3	A	CJ 101
___ CJ	134	Crim Invest	3	A	ENG 101, COM 110, CJ 101
___ CJ	135	Criminalistics	3	A	none
___ CJ	235	Laws Evidence	3	W	CJ 133 or perm
___ **Electives** (28 credits)					
CJ	125	Spec Studies	1-33	A	none
CJ	139	Police Traf Srv	3	Su	none
CJ	200	CO-OP	3-6	A	CJ 101, 133, 134, 135, 235
CJ	211	Security Mgt	3	F,W	none
CJ	212	Retail Security	3	W,Sp	none
CJ	213	Cmptr Security	3	F	none
CJ	234	Crim Invest II	3	Sp	CJ 134 or perm
CJ	236	Jvnl Law Prcd	3	W	CJ 133 or perm
CJ	239	Traffic Law	3	Sp	none
CJ	292	Crs Wrkps Sem	1-6	A	none
COM	120	Pub Speaking	4	A	none
ENG	130	Tech Writing	4	A	ENG 101
FIN	120	Prsnl Fin	4	A	none
JRN	101	Journalism I	3	F,W,Sp	ENG 101
LS	128	Alcohol/Drgs	3	A	none
POLI	111	S/L Govmnt	5	Sp	none
SOC	101	Intro to Soc	5	A	none

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

CUSTOMER SERVICE TECHNOLOGY

School of Continuing & Community Education
Division of Community Education
Business Building Room 230 967-4324 or 967-4327

Coordinator: Jo Rieber

The Program

The Customer Service Technology Certificate Program prepares students to deal successfully with the public in a wide range of professional situations in industry, government and business. This field includes positions in such areas as banking, finance, recreation, health, tourism, food and hotel industry, travel, utilities, sales, etc. Students learn to represent their employers by working with the public professionally and effectively. The program emphasizes the importance of maintaining customer good will and satisfaction while meeting the needs of the employer.

Development of the Customer Service Technology Program into a two year Associate of Applied Science Degree program is presently under consideration.

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program. The classes designed to assist students in reaching the skill level necessary to enter the certificate and degree programs are: BUS 080 (Business Math), OIS 107 (Keyboarding/WordPerfect). Any class in the preparatory skills may be waived if the student can demonstrate equivalent skill.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $100-$125 per quarter

CERTIFICATE

(52 Credit Hours Required)

Suggested First Quarter

Courses may be taken in any order as long as prerequisite requirements are met.

Course	Cr	Taught*	Prerequisites
Major Course Requirements			
___ ACCT 101 Elem Acct I	4	A	FIN 138 or w/FIN 138
___ ACCT 102 Elem Acct II	4	A	ACCT 101, FIN 138
___ BUS 101 Bus English	3	A	none
___ BUS 115 Bus Com	3	A	BUS 101, ENG 101
___ CIS 140 Bus Sftw Apl	3	A	ACCT 101
___ CL 101 Bsc Cmptr Cpts	3	A	none
___ COM 110 Org Intpl Com	3	A	none
___ CST 101 Customer Srv	3	A	none
___ CST 200 COOP	3	A	12 hr or work exp
___ ECN 201 Macro Eco	4	A	MGT 101
___ FIN 138 Fina Math	5	A	pre-test
___ MGT 101 Intro to Bus	4	A	none
___ MGT 205 Legal Envio	5	A	none
___ MKTG 103 Intro to Mrktg	5	A	none

**A*=All Quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

MANAGING CUSTOMER SERVICE SEMINAR SERIES

Workshops, Seminars and Conferences 967-4324 or 967-4214

3:00 p.m. - 5:00 p.m.
12 hours
$175 fee
Available Fall, Winter and Spring Quarters

This seminar series explores the following topics:

- evaluating the quality of current customer services
- establishing effective customer service policy
- hiring, training, motivating
- building good manager-employee relations
- managing employee conflicts
- leading effectively
- measuring customer service
- creating a positive work environment

DATA ENTRY

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 254 967-4201

Director Bill Laney

The Program

The Data Entry Program is designed to provide practical, short-term training that can be used for an OIS degree elective, or for immediate employment. If a person already has typing skills of 25 net words per minute, the program can be completed in one quarter. If a person has no typing skills, it will take two quarters to complete. New programs begin each fall, winter, and spring.

Placement services are provided by the College. At this time, employment opportunities look very good. Starting salaries are in the $5.50 to $6.50 per hour range.

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost for two quarters of training is $125.00.

CERTIFICATE

Suggested First Quarter			Credits
OIS	107	Beginning Keyboarding (Course may be challenged)	3

Course			Cr	Taught*	Prerequisites
___ OIS	107	Beg Kybdg	3	A	none
___ OIS	112	WrdPrfct	5	A	OIS 107, w/OIS 115
___ OIS	125	Beg Data Entry	3	F,W,Sp	type 20 wpm, OIS 107
___ OIS	131	Bus Mach	2	A	pretest

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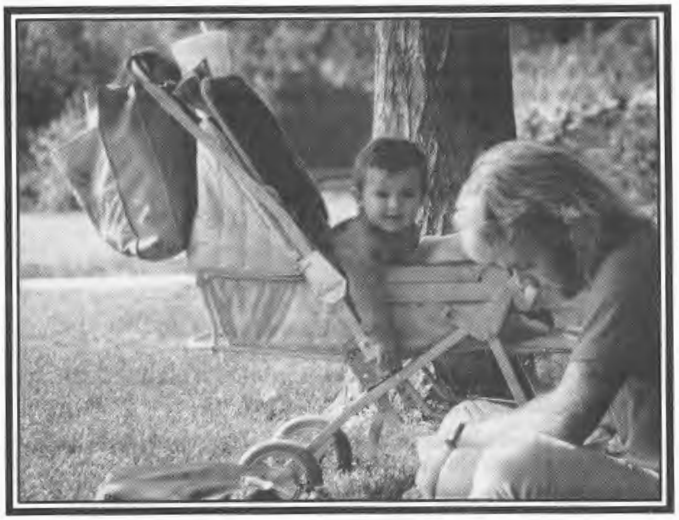


DEVELOPMENTAL STUDIES

School of Continuing & Community Education
Division of Community Education
Business Building Room 230 967-4327 (or)
Technology Building Learning Center, Room 108 967-4172

Faculty

Professors: Robert Blain, Jerry Giles, Tommie Matthews, William Witt; *Associate Professors*: Ray Emett, Marie Fulmer, Patricia Noffsinger; *Instructors*: Juanna Davis, Candace Wignall

Mission and Philosophy

The Developmental Studies Division has as its mission to ensure every student entering Salt Lake Community College the opportunity to protect and increase personal dignity by improving basic educational competencies and life skills, by enhancing college performance skills, by strengthening positive attitudes, by self-image and personal development, and by providing other learning enrichment opportunities that will help lead to success in the college environment and in life.

Goals

The Developmental Studies Division, in fulfilling the policy of Salt Lake Community College as "an open door" admissions institution, must, as a part of an educational continuum, provide for the needs of two groups of students:

1. Those requiring and/or desiring work in basic pre-college level competencies, such as reading, English, mathematics, basic computer literacy, ESL, etc.

2. Those requiring and/or desiring to improve learning enhancement activities such as speed reading, comprehension, study skills, personal development, ESL, etc.

These objectives are to help students succeed in college programs and college level courses, and to help prepare for life-long success.

Preparation Note

Students may enter most classes in Developmental Studies any day of any quarter. These students progress at their own rate on an individualized basis. They may enter a vocational/technical program after attaining entry level requirements for that program. Students will continue in Developmental Studies courses until basic competencies are developed for regular college program entry.

Students currently enrolled in a vocational/technical program may enroll in Developmental Study classes to upgrade their skills in any of the subject areas offered. Upon completion of any SLCC course, a student may receive high school credit through the Salt Lake or Granite school districts. (The department coordinates this function.)

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost of books, tools and supplies: up to $70.00 per quarter

DEPARTMENTAL OFFERINGS

(Courses administered by the Developmental Studies Department)

Course			Cr	Taught*	Prerequisites
BUS	080	Business Math	3	A	none
DS	010	Computer Awareness	1	A	none
DS	020	Reading	4	A	none
DS	025	Basic Spelling	3	A	none
DS	050	Prcpl Personal Success	3	A	none
ENG	015	Basic Writing	4	A	none
ENG	020	Sentence Writing	4	A	pre-test
ENG	099	Prep Eng Composition	4	A	pre-test
GED	010	GED Test Prep	1	A	none
LE	101	Overview Voc/Tech	2	F	none
LE	105	Intro Library/Media	1	F	none
LE	122	Career Development	3	A	none
LE	125	Spl Stds-Career/Prsnl	1-2	A	none
LE	126	Efficient Reading	3	A	none
LE	127	Study Skills	2	A	none
LE	130	Self-Image	2	A	none
MTH	020	Developmental Math	4	A	none
MTH	021	Math Tutoring Lab	1	A	none
MTH	030	Pre-Nursing Math	4	A	pre-test
MTH	035	Pre-Algebra Math	4	A	pre-test
MTH	036	Pre-Industrial Math	4	A	pre-test
MTH	099	Elementary Algebra	5	A	pre-test

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

EARLY CHILDHOOD DEVELOPMENT

School of Humanities and Sciences
Division of Health and Human Services
Eccles ECD Lab Building 967-4189

Faculty

Assistant Professor: Jeanette Mohlman, Dale D. Smith; *Instructors:* Jana Forsgren, Elaine Strom

The Program

The Early Childhood Development Program offers four options: a two-year A.S. degree, a two-year A.A.S. degree, CDA credential training, and a Child Care Attendant certificate. Entry into the program requires evidence of high school graduation, a GED, or concurrent enrollment.

A.S. Degree The two-year A.S. degree with emphasis in Early Childhood Development is designed for students who plan to transfer to an Early Childhood program in a four-year university or college.

A.A.S. Degree The two-year A.A.S. degree with emphasis in Early Childhood Development prepares the student to become a teacher or director of a child care facility. Special attention is given to providing the student the business skills needed to become an effective child care center administrator.

CDA (Child Development Associate Credential) Training and observation leading to the CDA credential is available through both the day and evening programs.

Evening Classes ECD courses for the options listed above are also offered during the evening.

Child Care Attendant This short-term (approximately 6 months) course meets at the Riverside campus. Completion of this option plus one year of experience working with children fulfills the state licensing requirements to be a director. The class is open entry/open exit and does not carry college credit. For more information see the 'Child Care' listing in this catalog.

General Information

Students in the ECD program must not have been convicted of any crimes against children and should possess the maturity and emotional stability required to take charge of a group of pre-school children.

Career Opportunities

An individual in early childhood prepares to work with children in preschool, child care or family child care as a teacher or in directing, owning/operating a child care center.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied with a "C" or better before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Elective Option

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Books and Supplies

Estimated book and supply cost: Approximately $40 per course

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 107 Credit Hours Required)

Suggested First Quarter

Courses may be taken in any order as long as prerequisite requirements are met.

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ ACCT	101	Elem Acct I	4	A	w/FIN 138
___ COM	120	Public Speaking	4	A	none
___ ENG	101	English Comp	4	A	pre-test
___ PSY	101	Gen Psych**	5	A	none
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 7 hours from at least two of the following general education areas:

Biological Science — Physical Science
Humanities — ** fills Social Science area

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (78 credits)

___ ECD	101	Intro ECD	4	F	none
___ ECD	110	Child Grth Dev	5	F	none
___ ECD	120	Guidance	3	F	none
___ ECD	121	Family Rel	5	Sp	none
___ ECD	130	Nutrition	3	W	none
___ ECD	131	Health & Safety	3	F	none
___ ECD	142	Music for Teach	3	F	none
___ ECD	143	Crtv Learning	3	Sp	none
___ ECD	150	Parenting	2	Sp	none
___ ECD	210	ECD Lab Exp	3	W,Sp	ECD 110
___ ECD	240	Admin of ECD	3	Sp	none
___ ECD	255	Infant Grth Dev	3	W	ECD 110
___ ECD	256	Child 2-5	4	W	ECD 110, w/ ECD 210
___ ECD	257	Child 6-12	3	W	ECD 110
___ ECD	260	Except Child	3	W	ECD 110
___ ECD	275	Curriculum Dev	3	Sp	ECD 256
___ ECD	280	Practicum Tchg	8	A	ECD 275, w/ECD 282
___ ECD	282	Teach Seminar	4	A	ECD 275, w/ECD 280
___ MGT	110	Small Bus Mgt	3	F,W,Sp	none
___ MGT	160	Prcpl of Superv	5	A	none
___ MGT	202	Entrprn	5	F,Sp	ACCT 101, MGT 101

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF SCIENCE DEGREE

(Minimum 111 Credit Hours Required)

Suggested First Quarter

Courses may be taken in any order as long as prerequisite requirements are met.

Course			Cr	Taught*	Prerequisites
General Requirements (55 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	120	Prcpl Pub Spkg	4	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	201	Mth for Elem I	4	W	MTH 101
___ MTH	202	Mth for Elem II	4	Sp	MTH 201
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
or					
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science					
- take PSY	101		5	A	none

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (57 credits)

Required (46 credits)					
___ ECD	101	Intro ECD	4	F	none
___ ECD	110	Child Grth Dev	5	F	none
___ ECD	120	Guid Yng Chld	3	F	none
___ ECD	130	Nutrition	3	W	none
___ ECD	131	Health & Safety	3	F	none
___ ECD	210	ECD Lab Exp	3	W,Sp	ECD 110
___ ECD	255	Infant Grth Dev	3	W	ECD 110
___ ECD	256	Child 2-5	4	W	ECD 110, w/ ECD 210
___ ECD	257	Child 6-12	3	W	ECD 110
___ ECD	275	Curriculum Dev	3	Sp	ECD 256, w/ECD 282
___ ECD	280	Practicum Teach	8	A	ECD 275
___ ECD	282	Teach Seminar	4	A	ECD 275, w/ECD 280
___ **Electives** (Take 11 credits)					
ECD	121	Family Rel	5	Sp	none
ECD	125	Special Topics	1-2	F,W,Sp	permission
ECD	142	Music for Teach	3	F	none
ECD	143	Creative Learn	3	Sp	none
ECD	150	Parenting	2	Sp	none
ECD	200	CO-OP Educ	3	TBA	permission
ECD	240	Admin/EC Prg	3	Sp	none
ECD	250	Art/Elem Tchrs	3	F	none
ECD	260	Except Child	3	W	ECD 110

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

CHILD DEVELOPMENT ASSOCIATE CREDENTIAL

The Program

The CDA training and assessment program prepares child care providers and home visitors to successfully meet the CDA credentialing requirements

The CDA program is competency based. Students demonstrate competency through on-site visits and field observations conducted by CDA trainers. Class work, field work and lab experience may be accomplished through a number of options. Contact the ECD department at 967-4189 for further information.

All entering, evening credit students should take either ECD 110 or PSY 150 during their first quarter. In addition, students seeking the Child Development Associate (CDA) credential are encouraged to register for onr credit of ECD 200. The time in ECD 200 will be used to acquaint the student with the CDA competencies and portfolio requirements.

Although numbered, the blocks may be taken in any sequence following completion of block 1 and students may begin the program any quarter. Each six credit block is allocated between class lecture, lab, and Cooperative Education. Students need not register for the full six credits, however.

Credit evening classes are fully transferable to the Early Childhood Development Associate degree. ECD 280 credits earned in this program will apply toward graduation ONLY if the student is awarded a CDA credential.

Students wanting the CDA credential for credit take the first six blocks.

Students wishing to complete an AS degree in Early Childhood Education through evening classes take all 11 blocks plus required General Education courses.

Suggested First Quarter

Courses may be taken in any order after completing Block 1

			Credits
Block 1			
ECD	110	Child Growth and Development	5
		or	
PSY	150	Human Growth and Development	5
ECD	200	Cooperative Education *(see note #1)*	1
Block 2			
ECD	120	Guidance of the Young Child *(see note #3)*	3
ECD	130	Child Nutrition and Meal Planning *(see note #3)*	3
Block 3			
ECD	101	Introduction to Early Childhood Education *(see note #3)*	4
ECD	200	Cooperative Education *(see note #1)*	2
Block 4			
ECD	142	Music for Teachers *(see note #3)*	3
ECD	150	Parent/Teacher Interaction	2
ECD	200	Cooperative Education *(see note #1)*	1
Block 5			
ECD	143	Creative Learning	3
ECD	280	Practicum *(see notes #1 & #4)*	2
ECD	200	Cooperative Education *(see note #1)*	1
Block 6			
ECD	131	Health, Safety, and First Aid	4
ECD	280	Practicum *(see notes #1 & #4)*	3
Block 7			
ECD	256	Toddlers and Preschooler Growth and Development *(see notes #2, #3 & #4)*	4
ECD	210	Lab Experience with Young Children *(see notes #3 & #4)*	1
ECD	200	Cooperative Education *(see note #1)*	1
Block 8			
ECD	257	Growth and Development of Children 6-12 *(see note #2)*	3
ECD	280	Practicum *(see notes #1 & #4)*	3
Block 9			
ECD	220	Curriculum Development *(see notes #3, #4, & #5)*	4
ECD	210	Lab Experience with Young Children *(see notes #3 & #4)*	2
Block 10			
ECD	260	Education of Exceptional Children *(see note #2)*	3
ECD	255	Infant Growth and Development *(see note #2)*	3
Block 11			
ECD	282	Teaching Seminar *(This class is waived for students who have completed ECD 280 — 8 hrs — and have been awarded the CDA credential)*	4

NOTES ON BLOCKS:

#1. *To qualify for this class, the student must be working directly with children at least 20 hours per week in a licensed (approved) child care facility.*

#2. *This class has a prerequisite of ECD 110 or PSY 150.*

#3. *The lab time associated with this class may be completed in one of two ways: (A.) The student must meet the work requirements as identified by cooperative education (see note #1) or (B.) The student must complete 3 hours of lab per week in the SLCC ECD Lab School during the lab school's regular operating hours (6:30 am - 4:30 pm).*

#4. *This class has a concurrent enrollment requirement. Please check with your advisor before registering.*

#5. *This class has a prerequisite of ECD 256.*

Please consult quarterly class schedules to determine when individual blocks are being offered.

EDUCATION

School of Humanities and Sciences
Division of Health and Human Services
Eccles ECD Lab School 967-4189

Faculty

Associate Professor: Dale Smith; Assistant Professor: Jeanette Mohlman *Instructors:* Elaine Strom

The Program

The AS degree in Education is designed for students who anticipate pursuing a degree in either elementary or early childhood education at a four-year college or university. Special arrangements with both Utah State University and Weber State University allow students to complete up to 120 credit hours on the SLCC campus.

The specific requirements leading to a bachelors degree in education differ among the four-year colleges and universities. In order to meet your individual educational needs, please consult with a faculty advisor before enrolling in any education classes.

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Cost for supplies and texts are comparable with other general education classes at approximately $40 per course.

ASSOCIATE OF SCIENCE DEGREE

(Minimum 100 Credit Hours Required)

Suggested First Quarter
Courses may be taken in any order as long as prerequisite requirements are met.

Course			Cr	Taught*	Prerequisites
General Requirements (55 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	120	Public Speaking	4	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	201	Mth for Elem I	4	W	MTH 101
___ MTH	202	Mth for Elem II	4	Sp	MTH 201
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ PSY	101	Gen Psych	5	A	none

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (minimum of 45 credits)					
Required (30 credits)					
___ ART	250	Art Elem Tchrs	3	F	none
___ ECD	110	Child Grth Dev	5	F	none
		or			
PSY	150	HmnGrwth/Dev	5	A	none
___ ECD	130	Nutrition	3	W	none
___ ECD	142	Music for Tchrs	3	F	none
___ ECD	260	Except Child	3	W	ECD 110
___ EDU	195	Intro Field Exp	1	W	ECD 110 w/EDU 210
___ EDU	210	Intro to Ed	3	W	ECD 110, w/EDU 195
___ EDU	263	Instrl Media	3	Sp	EDU 210,
___ EDU	270	Ed Psychology	3	W	w/EDU 210
___ PE	262	PE for Teachers	3	Sp	none
Electives (15 credits)					
___ ECD	101	Intro ECD	4	F	none
ECD	120	Guidance	3	F	none
ECD	121	Family Rel	5	Sp	none
ECD	125	Spc Topics	1-2	F,W,Sp	permission
ECD	131	Health & Safety	3	F	none
ECD	143	Creative Learn	3	Sp	none
ECD	150	Parenting	2	Sp	none
ECD	200	Cooperative Ed	3	TBA	permission
ECD	210	Lab Exp	3	W,Sp	ECD 110
ECD	255	Infants	3	W	ECD 110
ECD	256	Child 2-5	4	W	ECD 110 w/ECD 210
ECD	257	Child 6 -12	3	W	ECD 110
ECD	275	Curriculum Dev	3	Sp	ECD 256
ECD	280	Practicum Tch	8	A	ECD 275, w/ECD 282
ECD	282	Teach Sem	4	A	ECD 275, w/ECD 280
ENG	272	Childrens Lit	3	Sp	ENG 101
		or			

Fifteen hours of a foreign language or other content minor courses (must be approved by the Education Department)

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ELECTRICITY

School of Occupational Education
Division of Mechanics
Auto Trades Building Room 206 967-4138

Faculty

Assistant Professor: Ronald Schmith; *Instructors:* Ben Davis, Paul Lerdahl, Alan Thorpe, Charles E. Wood

The Program

The electrical trade consists of electrical crafts work which includes planning of the job, troubleshooting and repair and general construction of all types of jobs in the electrical industry.

The program provides a broad foundation in theory and applied technology needed to meet all requirements in todays field of electricity and automated control technology.

Preparation Note

The classes designed to assist students in reaching the skill level necessary to enter the degree programs are: MTH 099, CL 101 or CL 102. Any class in the preparatory skills may be waived if the student demonstrates equivalent skills.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of Advisor and/or Division Chair.

If a student is employed in a job involving Electricity, it is possible to earn some laboratory credit through Cooperative Education. With prior approval of a teaching faculty member and the faculty CO-OP coordinator for the Division of Mechanics the student would register for the regular laboratory course. (A "Section 80" designation identifies that credit is being earned through CO-OP.)

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Apprenticeship

Apprenticeship programs are composed of two parts: (1) on the job training and, (2) classroom instruction. On the job training is provided by a sponsor who exposes the apprentice to practical applications in all phases of a particular craft. The classroom related instruction is an organized and systematic form of instruction designed to provide the apprentice with knowledge of the theoretical and technical aspects of his/her craft. Total completion of an Apprenticeship program will take from three to five years.

Salt Lake Community College provides classroom instruction for apprenticeship programs. A student may enroll in the apprenticeship program any time that he/she secures a sponsoring employer. The College neither provides on the job training nor acts as a sponsor for apprentices. Individuals must locate their own sponsor.

Registered graduates in apprenticeship programs are eligible to receive a certificate of completion from the Bureau of Apprenticeship and Training and are eligible to apply for the Associate of Applied Science Degree in Apprenticeship from Salt Lake Community College.

For information of apprenticeship for electricity, contact SLCC Apprenticeship Coordinator Joe Mulvey, 967-4066. Bureau of Apprenticeship & Training, 542-5700 Electrical JATC, 485-8811. Also see information listed under Apprenticeship section of catalog.

Transfer Credit/Prior Experience

Credit may be granted toward graduation for apprenticeship training, prior experience, or schooling on an individual basis. Evaluation will be approved by the Division Chair.

Books and Supplies

Estimated cost of tools and supplies: $350
Estimated cost of books per quarter: $85

CERTIFICATE

(Minimum 52 Credit Hours Required)

Major skill topics:

1. Residential wiring
2. Motors and transformers
3. Magnetic motor and refrigeration controls
4. Introduction to electronics and solid state

This certificate supplies knowledge and skills to plan, price, install, and wire electrical equipment for residential construction, basic industrial maintenance (motors/magnetic controls/basic solid state controls) motor rewinding and fundamental transformer connections.

Suggested First Quarter			Credits
ELC	113	Basic Electricity	5
ELC	116	Residential Wiring	4
ELC	117	Electrical Codes, Residential/Commercial	4
ELC	147	Math Basic Electricity	5

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ELC	113	Bsc Electricity	5	F,W,Sp	w/ELC 147 or IND 147
___ ELC	116	Resdl Wiring	4	F,W,Sp	w/ELC 117
___ ELC	117	Elec Cds, R&C	4	F,W,Sp	w/ELC 116
___ ELC	123	Adv AC Elec	5	W,Sp,Su	ELC 113 w/ELC 148
___ ELC	127	Cds Ind Hazd	4	Sp,Su	ELC 117
___ ELC	128	D & Trans. Lab	4	W,Sp,Su	w/ELC 123
___ ELC	133	Mag Cntrl	5	F,Sp,Su	none
___ ELC	139	Mag M/R Cntrl	3	F,Sp,Su	w/ELC 133
___ ELC	140	S/State Cntrl	2	F,Sp,Su	w/ELC 133
___ ELC	147	Math Bsc Elec	5	F,W,Sp	none
___ ELC	148	Math AC Elec	5	W,Sp,Su	ELC 147

*A=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

DIPLOMA

(Minimum 77 Credit Hours Required)

*Suggested First Quarter***			Credits
ELC	113	Basic Electricity	5
ELC	116	Residential Wiring	4
ELC	117	Electrical Codes, Residential/Commercial	4
ELC	147	Math Basic Electricity	5

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
CL	101	Bsc Cmptr Cpts	3	A	none
COM	110	Org Intpl Com	3	A	none
ELC	110	Prcpl of Tech I	4	W	none
ELC	113	Bsc Elec	5	F,W,Sp	w/ELC 147 or IND 147
ELC	116	Resdl Wiring	4	F,W,Sp	w/ELC 117
ELC	117	Elecl Cds, R&C	4	F,W,Sp	w/ELC 116
ELC	123	Adv AC Elec	5	W,Sp,Su	ELC 113 w/ELC 148
ELC	127	Cds Ind Hazd	4	Sp,Su	ELC 117
ELC	133	Mag Cntrl	5	F,Sp,Su	none
ELC	139	Mag M/R Cntrl	3	F,Sp,Su	w/ELC 133
ELC	140	S/State Cntrl	2	F,Sp,Su	ELC 133
ELC	147	Math Bsc Elec	5	F,W,Sp	none
ELC	148	Math AC Elec	5	W,Sp,Su	ELC 147
ELC	226	Prog Cntrlrs	2	W	ELC 133, 227
ELC	227	Eletr Crct	2	W	ELC 113
ELC	229	Prog CntrlLab	3	W	ELC 140, 227
ELC	230	Electronic Prjcts	2	W	ELC 113, 221, 226
ELC	231	Seminar	1	Sp	none
ELC	232	Automation Lab	5	Sp	ELC 226, 230, 235
ELC	233	Intro to Rbtcs	4	Sp	ELC 226
ELC	235	Indl Instmn	5	Sp	ELC 145, 221
ELC	251	Specialization	1	Sp	taken sixtht quarter

___ Additional courses from area of specialization. *See specialization requirements following degree listings.*

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

** Evening students should check with Counselor/Division Chair for scheduling courses.

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 107 Credit Hours Required)

*Suggested First Quarter***			Credits
ELC	113	Basic Electricity	5
ELC	116	Residential Wiring	4
ELC	117	Electrical Codes, Residential/Commercial	4
ELC	147	Math Basic Electricity	5

Course			Cr	Taught*	Prerequisites
General Requirements (32 credits)					
Core Academic Skills					
CL	101	Bsc Cmptr Cpts	3	A	none
COM	110	Org Intpl Com	3	A	none
ELC	147	Math Bsc Elec	5	F,W,Sp	none
ENG	101	English Comp	4	A	pre-test
Reading level (determined by dept)					
General Education					
Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (75 credits)					
ELC	110	Prcpl of Tech I	4	W	none
ELC	113	Bsc Elec	5	F,W,Sp	ELC 147 or IND 147
ELC	116	Resdl Wiring	4	F,W,Sp	w/ELC 117
ELC	117	Elecl Cds, R&C	4	F,W,Sp	w/ELC 116
ELC	123	Adv AC Elec	5	W,Sp,Su	ELC 113 w/ELC 148
ELC	127	Cds Ind Hazd	4	Sp,Su	ELC 117
ELC	128	D & Trans. Lab	4	W,Sp,Su	w/ELC 123
ELC	133	Mag Cntrl	5	F,Sp,Su	none
ELC	139	Mag M/R Cntrl	3	F,Sp,Su	w/ELC 133
ELC	140	S/State Cntrl	2	F,Sp,Su	ELC 133
ELC	148	Math AC Elec	5	W,Sp,Su	ELC 147
ELC	221	Ind Elctrn	5	W	ELC 113
ELC	226	Prgm Cntlrs	2	W	ELC 133, 227
ELC	227	Elctrn Crct	2	W	ELC 113
ELC	229	Prgm Cnt Lab	3	W	ELC 140, 227
ELC	230	Elctrn Prjcts	2	W	ELC 113, 221, 226
ELC	231	Seminar	1	Sp	none
ELC	232	Autmn Lab	5	Sp	ELC 226, 230, 235
ELC	233	Intro to Rbtcs	4	Sp	ELC 226
ELC	235	Ind Instmn	5	Sp	ELC 145, 221
ELC	251	Specialization	1	Sp	take sixth quarter

___ Additional courses from area of specialization. *See specialization requirements following degree listings.*

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

** Evening students should check with Counselor/Division Chair for scheduling courses.

Specialization Requirements

(Diploma & AAS Degree)

AUTOMATED CONTROL TECHNOLOGY

Automated Control Technology gives students the flexibility of taking electrical classes then specializing in courses aimed at robotics, computer aided drafting and computer aided manufacturing systems.

AST	110	Mech/Devices	3	Sp	w/AST 106
AST	221	Microproc Apl	5	W,Sp	ELET 173
AST	230	CNC/CAM	5	F	ELET 173
AST	270	Cmptr Robotics	5	F	MTH 106
CHEM	121	Prcpl of Chem	5	F,W,Sp	MTH 105 or equiv
CD	208	Cmptr Draft	3	Su	see Course Descrip
CL	130‡	Micro Prg	3	A	MTH 101/equiv
ELET	107	Calculus	5	A	ELET 106 or MTH 106
MTH	101‡	Inter Alegebra	5	A	pre-test
MTH	105‡	Col Algebra	5	A	MTH 101
MTH	106	Plane Trig	5	A	MTH 105

‡ take in place of CL 101, ELC 147 & ELC 148

COMMERCIAL/INDUSTRIAL ELECTRICITY INDUSTRIAL ELECTRONICS

This program includes the three quarters of the electricity certificate. The complete program supplies knowledge and skills to plan, price, install, wire, troubleshoot and improve the efficiency of conduit and electrical equipment for construction (industrial/commercial/residential), industrial electrical maintenance (lighting/motors/transformers/magnetic motor controls/programmable controllers/switch gear) industrial electronics, basic robotics, and industrial instrumentation (solar heat/pneumatic/hydraulic/electric).

Major skill topics:

1. Residential wiring
2. Motors and transformers
3. Magnetic motor and refrigeration controls
4. Commercial/Industrial wiring and maintenance
5. Industrial electronics and programmable/solid state motor controls
6. Industrial Instrumentation

___	ELC	211	Tech Rpt Dev	4	F,Su	none
___	ELC	213	Elecl Principles	5	F,Su	ELC 123
___	ELC	214	Wiring/Mntce	5	F,Su	ELC 139, 213
___	WLD	105	Rltd Welding	3	F,W,Sp	none

COMMERCIAL/INDUSTRIAL ELECTRICITY & REFRIGERATION/ AIR CONDITIONING

(This program is listed in the catalog under Refrigeration)

PROCESS INSTRUMENTATION CONTROL

967-4061

This program trains field and process supervisory control electri cians to meet the challenges of interfacing various controls ranging from thermo-couple temperature measurement to transmission over 4-20mA lines and supervisory control communicating over a fiber-optic data highway system. Systems may be used to regulate the operation of robotics, ovens, metal refinery, dairy products, scanners, variable speed drives, elevators, and other automated control systems. Such diversity may explain why "instrument techs" are in high demand at this time. Students may become an in house system specialist or may work for a controls company which services systems for several businesses. Emphasis is placed on a qualitative trouble-shooting scheme using computers and test equipment.

The student must have completed a certificate in electricity or electronics or have a journeyman license, apprenticeship or other trade experience prior to entrance into this program and provide such evidence to the department coordinator.

Major skill topics:
1. Programmable control
2. Industrial electronics
3. Process instrumentation control

Students will be eligible to apply for national certification upon completion of this diploma and 6 months experience.

___	ELC	241	Pros Cntrl Thry	3	Sp,Su	ELC 235
___	ELC	242	Pros Cnt Lab	4	Sp,Su	ELC 241
___	ELC	243	P&I Cds/Stnds	3	Sp,Su	ELC 235
___	ELC	245	Ismtrc/Vndr Lit	3	Sp,Su	ELC 235

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ELECTRONIC ASSEMBLY/MECHANICS

School of Business and Technology
Division of Technology
Riverside Campus 328-5539

Faculty Keith Bingham, Cindy Mann, Ruth Pabst

ELECTRONIC ASSEMBLY

Suggested First Quarter
This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. *The hours completed do not apply toward other college programs.*

General Information
The student learns electronic manufacturing techniques in soldering, wiring, circuit board assembly and electromechanical assembly. Student will learn to use a microscope for miniature work. Schematic diagrams, symbols, and various types of operation sheets and tables are used as instructional aids in order to teach the student to use various types of documentation.

Special Requirements
Good finger dexterity and good color perception.

Job Information
The student working as an electronic assembler will assemble electronic equipment, following blueprints, wiring diagrams and schematic. Student will connect lead wires of components such as resistors, capacitors, transistors and diodes to specified terminals using a soldering iron. Also route and fasten jumper wires and cables to specified contact points, following wiring diagrams and wire lists. The assembler may also test circuits for shorts or open wires using a continuity meter. Student may solder precut wires to multiple pin connectors and lace wires into cable assemblies.

Course of Study	Hours
Science of Soldering	20
Hand Tools	6
Soldering (advanced)	36
Component Mounting (circuit board)	8
Component Identification	12

Schematic Diagrams	12
Color Code	8
Microscope	12
Mechanical Assembly	6
Job Club	60
Total Hours	**180**

ELECTRONIC MECHANICS

Suggested First Quarter
This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. *The hours completed do not apply toward other college programs.*

General Information

This program enables a student to develop entry-level skills in the electronics field. Core classes of Electronic Assembly and Basic Electronic Theory must be successfully completed prior to declaring an emphasis in Electronic Test Technician, Micro Computer Repair or Consumer Electronics. A student with previous electronic theory background may take the challenge test for prerequisite courses.

Special Requirements

Good manual and finger dexterity and color perception. Basic reading and math skills.

Job Information

Electronic Assembly

(Approximately 6 Weeks) The student working as an electronic assembler will assemble electronic equipment, follow blueprints, wire diagrams and schematics. The student will connect lead wire of components such as resistors, capacitors, transistors and diodes to specified terminals using a soldering iron. Also route and fasten jumper wires and cables to specified contact points, following wiring diagrams and wire lists. The assembler may also test circuits for shorts or open wires using a continuity meter. The student may solder precut wires to multiple pin connectors and lace wires into cable assemblies.

Courses	Hours
Science of Soldering	20
Hand Tools	6
Soldering (Advanced)	36
Component Mounting (Circuit Board)	8
Component Identification	12
Schematic Diagrams	12
Color Code	8
Microscope	12
Mechanical Assembly	6
Job Club	
Total Hours	**180**

Basic Electronic Theory

(Approximately 5--6 Months) A student can use the knowledge gained in this course to perform various entry level electronics tasks. These include installation of audio components, security and alarm systems, repair of copy machines and appliances.

Courses	Hours
Electronics Assembly	120
AC and DC Basic Theory	55
RLC Circuits	60
Motors, Generators, and Transformers	70
Solid State Amplifiers	65
Basic Trouble Shooting	50
Job Club	60
Total Hours	**480**

Electronic Test Technician

(Approximately 6 Months) The student is trained to perform a variety of electronic, mechanical and electromechanical tests using a full range of electronic test equipment. The student learns to test electronic systems, subassemblies, and parts to insure unit functions according t specifications or to determine the cause of unit failure.

Courses	Hours
Prerequisite: Basic Electronic Theory or Equivalent Electronic Theory	420
Solid State Devices	95
Resonance and Oscillators	65
Computer Math	70
Gates and Computer Components	40
Micro Processor Programming	75
Job Club	60
Total Hours	**825**

Micro Computer Repair

(Approximately 9 months) The student is trained to analyze and verif digital circuit operations. The student will have sufficient backgroun in electronics theory, digital electronics and test procedures as well a the use of both analog and digital test equipment to perform tests an repair most types of microprocessor operated equipment.

Courses	Hours
Prerequisite: Basic Electronic Theory or Equivalent Electronic Theor	420
Number Systems	85
Logic Symbology	90
Computer Components	210
Micro Processors	275
Job Club	60
Total Hours	**1,140**

ELECTRONIC TECHNOLOGY

School of Business and Technology
Division of Technology
Metal Trades Building Room 228 967-4098

Faculty

Professors: Dallis J. Christensen, Violetta Tsibranska, Ulrich Zeisler; *Associate Professors:* Ronald Ash, Stanley Lawrence, Violetta Tsibranska, William Walker; *Assistant Professors:* Joseph J. Baker, Richard Darnell, John Triplett.

Preparation Note

Students who need to take preparatory classes to meet the requirements of first quarter classes should plan on extra time to complete a degree. ASSET testing will be done upon entry to the college unless the student has had prior college-level experience.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken. ELET 103 (Day Program) or ELET 101 & 102 (Evening Program) are prerequisite for the program's first quarter.

Elective Options

Cooperative Education credit may be earned in lieu of some of the laboratory work for completion of the AAS degree requirements. Also a unique CO-OP program is available with several government facilities. After successful completion of the first year of the Electronic Technology Program, and prior to starting the sixth (final) quarter, students who apply and are accepted will work in paid CO-OP positions related to Electronic Systems with opportunities for career employment after graduation. There is also a program for students wishing to specialize in Medical Instrumentation to satisfy the requirements of ELET 260, 261 through CO-OP. Students interested in CO-OP who have completed all elective work must enroll for at least one credit of CO-OP to obtain CO-OP positions not requiring the two quarter limitations.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies:

Approximate total cost of books and supplies is:
First year, $650.00; Second year, $270.00

ASSOCIATE OF APPLIED SCIENCE DEGREE

Day Program

(Minimum 148 Credit Hours Required)

The Program

The AAS Degree is designed to provide the student with a broad background in various aspects of theoretical and applied electronics. Mathematics and physics support and enhance the program.

This prepares the electronic technician to assist the engineer in many areas of this highly technical and expanding field. The degree can also provide the first two years of an Electronics BS Degree in EET when supplemented with required General Education requirements.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program. Basic concepts of mathematics, English and reading will be tested prior to entering the program. Those students lacking in these areas must take courses to bring their skills to an acceptable level. If the student elects to take the MTH series, MTH 101 must be satisfied as prerequisite before taking MTH 105.

An Associate of Applied Science in Avionics in the Electronic Technology program is available to any student desiring to pursue this field. The student needs to counsel with the department coordinator or division chair to arrange a course outline.

Suggested First Quarter			Credits
ELET	106	Advanced Electronics Math	5
ELET	110	Active Devices	6
ELET	130	Digital Circuits I	6
ENG	101	English Composition	4

Course			Cr	Taught*	Prerequisites
General Requirements (24 credits)					
Core Academic Skills					
___ Communications			3	A	variable
___ ENG	101	Eng Comp	4	A	pre-test
___ Reading		(determined by dept)		A	variable
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credits from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (121 credits)					
Required					
___ CD	208	Cmptr Draft	3	W,Su	AST 102 or ELET 110 or ENGR 101 or MFG 130
___ CHEM	121	Prcpl Chem I	5	F,W,Sp	MTH 105
___ CL	130	BASIC	3	A	MTH 101 or equiv
___ ELET	101	Bsc Eltrn (DC)	6	A	None
		and			
___ ELET	102	Bsc Eltrn (AC)	6	A	None
		or			
___ ELET	103	Cmb Bsc Eltrn	12	A	pre-test

___	ELET	105	Bsc Eltrn Math	5	A	pre-test
___	ELET	106	Adv Eltrn Math	5	A	ELET 105 or MTH 105
___	ELET	107	Calc for Eltrn	5	A	ELET 106 or MTH 106
___	ELET	110	Active Devs	6	A	ELET 101/102 or 103
___	ELET	120	Linear Crcts I	6	A	ELET 110
___	ELET	121	Linear Crcts II	6	A	ELET 106 or MTH 106, & ELET 120
___	ELET	130	Dgtl Crcts I	6	A	ELET 110 for AST students, AST 106
___	ELET	131	Digl Crcts II	6	A	ELET 130
___	ELET	140	Com I	6	A	ELET 120
___	ELET	220	Adv Msrmnts	6	A	ELET 121
___	ELET	240	Com II	6	A	ELET 140
___	ENG	130	Tech Wrtg	4	A	ENG 101
___	PHY	117	Mechanics	5	A	MTH 106 or ELT 106
___	PHY	118	Ht, Lt & Snd	5	W,Sp,Su	PHY 117

___ **ELET Electives** (take 24 credits) see the special elective tracks listed below for individual specialties.

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF SCIENCE DEGREE

Day or Evening

(Minimum 165 Credit Hours Required)

Suggested First Quarter			Credits
MTH	106	Advanced Electronics Math	5
ELET	110	Active Devices	6
ELET	130	Digital Circuits I	6
ENG	101	English Composition	4

Course				Cr	Taught*	Prerequisites
General Requirements (52 credits)						
Core Academic Skills						
___	CIS	102	CIS Intro	4	A	none
___	COM	120	Prcpl Pub Spkg	4	A	none
___	ENG	101	English Comp	4	A	pre-test
___	ENG	102	English Comp	4	A	ENG 101
___	MTH	105	Col Algebra	5	A	MTH 101
___	PE		Physical Educ	2	A	none
American Institutions						
___	HIS	170	American Civ	5	A	none
			or			
___	POLI	110	Am Ntl Gov	5	A	none
General Education						
___	Biological Science			5	A	variable
___	Humanities			5	A	variable
___	Interdisciplinary Course			5	A	variable
___	Physical Science			5	A	variable
___	Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (112 credits)

___	CD	208	Cmptr DrDraft	3	Su	AST 106 or ELET 101, 153 or ENGR 101 or MFG 150
___	CHEM	121	Prcpl Chem I	5	F,W,Sp	MTH 105
___	ELET	101	Bsc Eltrn (DC)	6	A	None
			and			
___	ELET	102	Bsc Eltrn (AC)	6	A	None
			or			
___	ELET	103	Cmb Bsc Eltrn	12	A	pre-test
___	ELET	104	Tech BASIC	3	A	none
___	ELET	110	Active Devs	6	A	ELET 101,102 or 103
___	ELET	120	Linear Crcts I	6	A	ELET 110
___	ELET	121	Linear Crcts II	6	A	ELET 106,MTH 106 or ELET 120
___	ELET	130	Dgtl Crcts I	6	A	ELET 110 & AST students AST 106
___	ELET	131	Digl Crcts II	6	A	ELET 130
___	ELET	140	Com I	6	A	ELET 120
___	ELET	220	Adv Msrmnts	6	A	ELET 121
___	ELET	230	Cmptr Sys I	6	A	ELET 131, 210
___	ELET	240	CoCom II	6	A	ELET 140
___	ELET	241	Mcrwv Com	6	F,Sp	ELET 210
___	ENG	130	Tech Wrtg	4	A	ENG 101
___	MTH	106	Plane Trig	5	A	MTH 105
___	MTH	111	Calc I	5	A	MTH 106
___	PHY	117	Mechanics	5	A	MTH 106 or ELET 106
___	PHY	118	Ht, Lt & Snd	5	W,Sp,Su	or PHY 117
___	PHY	171	Engr Phy I	4	F,W	MTH 111 & w/PHY 181
___	PHY	181	Engr Phy Lab	1	A	w/PHY 171

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

Note #1 ELET 101 and 102 are evening programs. ELET 103 is the day time equivalent. Students take either 101/102 or 103.

Note #2 Additional lower division courses required that can be transfered to Weber State or Brigham Young University: ***(Not required for AS at SLCC)***

___	CS	170	FORTRAN 77	4	A	MTH 106, CIS 101, or ENG 101 w/MTH 111
___	MTH	112	Calc II	5	A	MTH 111
___	HU or LS		Elective	6		

Note #2 An additional 60 hours of upper division classes are needed from Weber State for the BSEET Degree after receiving the AS degree from SLCC.

ELECTRONICS PROGRAMS SPECIAL ELECTIVE TRACKS

Prerequisites same as ELET AAS Degree Program

Suggested First Quarter			Credits
AVI	103	Aircraft Familiarization	3
ELET	106	Advanced Electronics Math	5
		or	
MTH	106	Plane Trigonometry	5
ELET	110	Active Devices	6
ELET	130	Digital Circuits I	6
ENG	101	English Composition	4

Course				Cr	Taught*	Prerequisites
General Requirements (29 credits)						
Core Academic Skills						
___	COM	110	Org Intpl Com	3	A	none
___	ENG	101	Eng Comp	4	A	pre-test or ENG 099
___	ELET	107	Calc for Eletr	5	A	MTH 106 or ELET 106
___	Reading (determined by dept)				A	variable
General Education						
___	Interdisciplinary Course			5	A	variable

___ Choose an additional 12 hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Avionics

Note: This track requires entry into the specialization courses in the first quarter. Prerequisite quarter the same as Electronic Technology program

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ AST	290	Auto Eletr Sys	5	W	ELET 121,131
___ AVI	103	Acft Fam	3	W,Su	none
___ AVI	110	Intro Avionics	4	W,Su	ELET 102 or ELET 103
___ AVI	120	Avionic Sys	4	W,Su	AVI 110, ELET 110
___ AVI	130	Air Instr.	5	W,Su	AVI 110, ELET 110
___ AVI	250	Nav Sys	5	W,Su	AVI 110, ELET 121
___ AVI	260	Auto Pilot Sys	5	W,Su	AVI 110, ELET 121
___ AVI	270	Radar Sys	5	F,Sp	AVI 110 & w/ELET 241
___ ELET	110	Act Dev	6	A	ELET 101, 102, 103
___ ELET	106	Adv Elec Mth	5	A	MTH 105
___ ELET	120	Lin Crct I	6	A	ELET 110
___ ELET	121	Lin Crct II	6	A	ELET 120 & ELET 106 or MTH 106
___ ELET	130	Dig Crct I	6	A	ELET 110 & AST students take AST 106
___ ELET	131	Digital Crct II	6	A	ELET 130
___ ELET	140	Com I	6	A	ELET 120
___ ELET	230	Cmptr Sys I	6	A	ELET 210, 131
___ ELET	231	Cmptr Sys II	6	A	ELET 230
___ ELET	240	Com II	6	A	ELET 140
___ ELET	241	Micro Com	6	F,Sp	ELET 210
___ ELET	251	Feedback Cntrl	6	F,Sp	ELET 121

Communications:

___ ELET	241	Micro Com	6	F,Sp	ELET 210
___ ELET	245	L/F Optics	6	W,Su	permission
___ ELET	250	Instrmntn Fdmt	6	W	ELET 140
___ ELET	290	Special Topics	6	A	last quarter in ELET

Consumer Electronics:

___ ELET	242	TV Sys I	6	W,Su	ELET 210
___ ELET	243	TV Sys II	6	W,Su	ELET 210
___ ELET	244	VCR Sys	6	F,Sp	ELET 243
___ ELET	270	Consmr Svcg	6	F,Sp	ELET 243

Digital Electronics:

___ ELET	230	Cmptr Sys I	6	A	ELET 210, 131
___ ELET	250	Instrmntn Fdmt	6	W	ELET 140
___ ELET	251	Feedback Ctrl	6	F,Sp	ELET 121

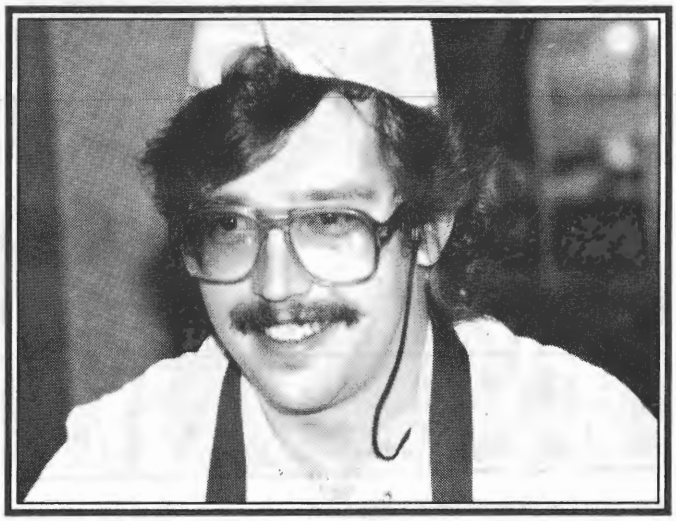
Instrumentation:

___ AST	290	Auto Eletr Sys	5	F,W,Sp	ELET 121,131
___ ELC	235	Ind Instrmntn	5	Sp	ELC 145, 221
___ ELET	250	Instrmntn Fdmt	6	W	ELET 140
___ ELET	251	Feedback Ctrl	6	F,Sp	ELET 121

Medical Electronics:

___ ELET	260	Instrmntn I	6	F,Su	ELET 210 & w/ELET 262
___ ELET	261	Instrmntn II	6	F,Sp	ELET 260
___ ELET	262	Apl Physgy	3	F,Su	ELET 210& w/ELET 260
___ ELET	290	Special Topics	6	A	last quarter in ELET

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable



EMPLOYMENT SPECIALIST (JOB COACH)

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 238 967-4524

Coordinator
Wendy Potter

The Program
Students will acquire fundamentals of successful job coaching. Emphasis will be on the techniques of securing employment in the community for persons with severe disabilities, and teaching them how to succeed on the job. Follow up procedures with employers. Coordination of services with State funding agencies are included.

Students receive 40 hours of classroom training consisting of job development and analysis, marketing strategies, interagency planning, parent and employer education, case management, and reporting procedures. A field practicum will be arranged by the instructor, with feedback and technical assistance provided to the students.

Class Availability
Classes are scheduled on an as needed basis. Contact the Division of Continuing Education.

Books and Supplies
All training materials will be provided.

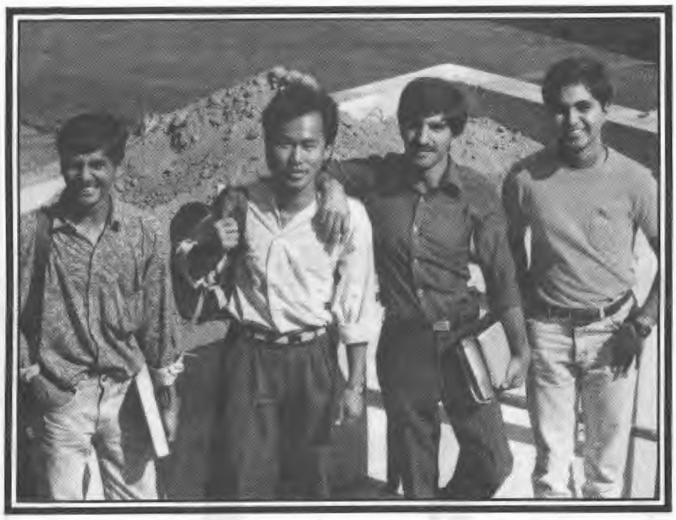
CERTIFICATE
(40 Hours Class Participation)

Suggested First Quarter

SETT	101	Supported Employment Training	3

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ SETT	101	Sup Emp Trg	3	TBA	none
___ SETT	200	Sup Emp CO-OP	3	TBA	SETT 101

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable



ENGLISH AS A SECOND LANGUAGE

School of Continuing & Community Education
Division of Community Education
Redwood Road Campus
Business Building Room 230 967-4327 or
Technology Building Learning Center Room 108 967-4172

Riverside Campus
1040 West 700 South 328-5590 or 967-4313

COLLEGE PREP ESL

Faculty

Assistant Professor: Dean Huber; *Instructor:* Phyllis Prawl; *ESL Counselor:* John Wiemer - *CC 230J 967-4077*

Program

This program is for students who are not native speakers of English. The purpose of the program is to prepare the students to successfully complete other programs at the college.

Objectives include:

1. A review of the English verb tense system in order to practice classroom skills, improve understanding of written and spoken English, and communicate more effectively when speaking or writing English.
2. Practice of listening comprehension skills so the students can successfully understand an American teacher in a technical class.
3. Development of English speaking skills so the students can participate in classroom discussions, ask questions when they need to, and successfully communicate what they know.
4. Development of college-level textbook reading skills.
5. Development of basic writing skills in preparation for the college-level composition class.

Preparation

Students who wish to enroll in the ESL classes must demonstrate their proficiency in English by scoring within an acceptable range on either the (CALT) Computer Adaptive Language Test or the TOEFL (Test of English as a Foreign Language). Admission in the ESL program requires a score between 55-70 on the CALT administered by the Testing and Assessment Center at Salt Lake Community College or between 70 and 82 on a Michigan Test from another school, or a TOEFL score between 450 and 500. Students may enter a technical/vocational program by scoring above these ranges on the CALT and TOEFL or after fulfilling the entry level requirements for that program. Generally one quarter of ESL studies is sufficient to prepare the students to enter other programs.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Approximate book and supply cost: $50 per quarter

Course			Cr	Taught*	Prerequisites
ESL	101	Grammar, Listening, Speaking for ESL	7	A	pre-test
ESL	102	Writing for ESL	4	A	pre-test
ESL	103	Reading for ESL	4	A	pre-test

A=All quarters, *F*=Fall, W=Winter, *Sp*=Spring, *Su*=Summer *TBA*=variable

BEGINNING AND INTERMEDIATE ESL

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. *The hours completed do not apply toward other college programs.*

Faculty

Instructor: Mary Mellott

DAY CLASSES

(Riverside Campus)

Courses

Beginning ESL
This is a more traditional beginning ESL course. Topics covered include: banking, home/apartment repairs, dealing with landlords, bill paying, etc. Emphasis is on everyday living skills and language skills involved in getting/keeping a job.

Advanced Beginning ESL
Students work on skills necessary to deal successfully with many of their day-to-day communication needs. They also begin to discuss more abstract concerns such as traditions, holidays, customs, etc. Emphasis remains on job getting/keeping skills as well as appropriate social behavior.

Intermediate ESL
This course is designed as a transition from survival skills to a more vocational/academic orientation

All levels work on improving reading comprehension, writing, listening, and speaking skills. U.S. History, Geography, and Government are also incorporated in the curriculum of each level.

EVENING CLASSES
(Redwood Road Campus)

Courses

Beginning ESL
This is a more traditional beginning ESL course. Topics covered include: banking, home/apartment repairs, dealing with landlords, bill paying, etc. Emphasis on survival skills and language skills involved in getting/keeping a job.

Advanced Beginning ESL
Students work on skills necessary to deal successfully with many of their day-to-day communication needs. They also begin to discuss more abstract concerns such as traditions, holidays, customs, etc. Emphasis remains on job getting/keeping skills as well as appropriate social behavior.

ENGLISH/HUMANITIES

School of Humanities and Sciences
Division of Humanities
Administration Building Room 210 967-4338

Faculty

Professor: Richard Jensen; *Associate Professors*: Judy Lunt, Alma McKertich, Linda Peterson,; *Assistant Professors*: Patricia Hadley, Liz Montague, Stephen Ruffus, Ron Seversen; *Instructor*: Allison Fernley

The Program

The English/Humanities Division assists students in developing writing skills to meet demands of trade areas, business classes, technological fields and academic pursuits. A one-year sequence of ENG 101, 102 and 103 is designed to give the student a wide variety of writing skills to meet many educational and employment needs.

In addition, ENG 120 (Introduction to Language Study), ENG 130 (Technical Writing) and ENG 245 (Imaginative Writing) provide more specialized skills.

The study of humanities encompasses those disciplines which recognize the value and dignity of the human family. Through methodologies of history, languages, philosophy, literature and the arts, students explore what it means to be human, developing the abilities of ethical perception, critical thinking and aesthetic appreciation in the course of their studies.

Humanities 101, 102 and 103 offer students an introduction to the arts and to the development of intellectual traditions. Fine Arts/Humanities 110 focuses on evaluation and appreciation of the visual arts. Humanities 111 and 112 take students on a survey of art history.

Courses in British, American and Comparative Literature provide additional opportunities for students to sharpen writing, thinking and analytical skills as well as to widen and increase their enjoyment in reading.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken. Students who need to take preparatory classes to meet the requirements of any course should plan on extra time to complete a degree.

Elective Options

With prior approval, a student working in a job related to the Humanities may earn up to six hours of General Elective credit. See ENG 200, and HU 200 for more details.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $00-$150 per quarter

HUMANITIES

ASSOCIATE OF ARTS DEGREE

(Minimum 100 Credit Hours Required)

Suggested First Quarter

Courses may be taken in any order as long as prerequisite requirements are met. We recommend that courses in writing skills be completed in the first year.

Course			Cr	Taught*	Prerequisites
General Requirements (51 hours)					
Core Academic Skills					
___ CL	101	Bsc Cptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ.	5	A	none
OR					
___ POLI	110	Am. Ntl. Gov.	5	A	none
General Education (See page 11 for specific general education requirements for the AA degree and list of courses in these fields)					
___ Biological Science			5		
___ Humanities			5		
___ Interdisciplinary Course			5		(select other than Humanaites)
___ Physical Science			5		
___ Social Science			5		
Humanities Core (40 hours)					
Required					
___ HU	102	Greeks to Ren	5	W	none
___ HU	103	Ren-Mod Day	5	Sp	none
___ Languages (15 consecutive hours)					
___ **Choice of**					
ENG	103	Eng Comp	3	Sp	ENG 101
ENG	245	Imag Wrtg	3	W	ENG 101
___ **Choose additional hours from at least three of the following areas:**					
Cultural Anthropology (courses not established at catalog printing time)					
English					
ENG	120	Intro to Lang	3	W,Sp	ENG 101
ENG	125	Spec Stds Eng	1-2	F,W,Sp	ENG 101, perm
ENG	130	Tech Writing	4	A	ENG 101
ENG	200	English COOP	3-6	A	permission
History					
HIS	120	Erly U.S. Hist	5	F,W	none
HIS	121	His/Civil War	5	W,Sp	none
HIS	299	Utah History	5	A	none
Humanities					
HU	101	Intro Hum	5	F,W,Sp	none
HU	110	Art Apprec	3	F	none
HU	111	Svy Art Hist	5	F	none
HU	112	Hist Mod Art	5	F,W,Sp	none
HU	125	Spec Studies	1-2	F,W,Sp	none
HU	200	HU COOP	3-6	A	permission
HU	241	Great Books	3	Sp	ENG 101
HU	242	Great Books	3	F	ENG 101
HU	272	Intro Shakes	3	Sp	ENG 101
HU	275	Phlphy in Lit	5	A	ENG 101
Literature					
ENG	250	Intro to Lit	5	W,Sp	ENG 101
ENG	252	19th Cent Lt	3	W	ENG 101
ENG	253	Mod Am Lit	3	F,W,Sp	ENG 101
ENG	261	19th British Lit	3	W	ENG 101
ENG	262	Mod British Lit	3	Sp	ENG 101
ENG	270	Amer West Lit	3	Sp	ENG 101
ENG	271	Grt Wmn Wrt	3	Sp	ENG 101
ENG	272	Children's Lit	3	Sp	ENG 101
ENG	276	Native Am Lit	5	W	ENG 101
Music					
ECD	142	Music Teach	3	F	none
HU	121	Svy of Music	3	A	none
HU	122	Svy of Music	3	A	none
HU	123	Svy of Music	3	A	none
MUS	105	Music & Cult	5	F,W,Sp	none
Philosophy (courses not established at catalog printing time)					
Theatre					
THE	101	Svy of Theatre	5	A	none
THEE	111	Basic Acting I	3	A	none
THEE	112	Basic Acting II	3	A	THEE 111
THEE	214	Intro to Film	4	TBA	FLMM/THEE 105 or 107
THE	220	Musical Theater	3	TBA	THEE 111 or perm
Visual Arts					
ART	171	Bg Ptg, Wtrclr	3	F,Su	none
ART	172	Bg Ptg, Oil	3	W,Sp	none
ART	299	Spc Studies	1-3	A	permission
Allied Hours (9 credit hours)					
___ **Choose from the following:**					
Fine Arts					
ART	160	Pottery	2	TBA	none
ART	163	Pottery	2	TBA	none
ART	165	Pottery	2	TBA	ART 160 or perm
ART	265	Adv Pottery	2	TBA	ART 185 or perm
DNC	186	Inter Modern	1	W,Sp	DNC 185 or equiv
DNC	196	Inter Jazz	1	A	PE 195 or equiv
DNC	197	Adv Jazz	1	TBA	DNC 195 or perm
ECD	250	Art for Elem	3	F	none
Languages					
FRN	201	Interm French	5	F	French 103 or equiv
FRN	202	Interm French	5	W	French 210 or equiv
GER	201	Interm German	5	F	GER 103 or equiv
GER	202	Interm German	5	W	GER 103 or equiv
FRN	275	French Lit	5	Sp	FRN 103 or equiv
SPN	201	Interm	5	F	SPN 103 or equiv
SPN	202	Interm	5	W	SPN 201 or equiv
SPN	275	Spanish Lit	5	Sp	SPN 103 or equiv

Social Science See Social Science Program for courses

Biological Science See Biology Program for courses

Communications See Communications Program for courses

DEPARTMENTAL OFFERINGS

(Courses administered by the English/Humanities department)

ENG	101	English Comp	4	A	pre-test
ENG	102	English Comp	4	A	ENG 101
ENG	103	English Comp	3	Sp	ENG 101
ENG	120	Intro to Language	3	W,Sp	ENG 101
ENG	125	Spec Studies Eng	1-2	F,W,Sp	ENG 101 , Perm
ENG	130	Technical Writing	4	A	ENG 101
ENG	200	English COOP	3-6	A	permission
ENG	245	Imaginative Wrtg	4	F,W,Sp	ENG 101
ENG	250	Intro to Literature	5	W,Sp	ENG 101
ENG	252	19th Century Lt	3	W	ENG 101
ENG	253	Mod American Lit	3	F,W,Sp	ENG 101
ENG	261	19th British Lit	3	W	ENG 101
ENG	262	Mod British Lit	3	Sp	ENG 101
ENG	270	Amer West Lit	3	Sp	ENG 101
ENG	271	Intro Grt Wmn Wrt	3	Sp	ENG 101
ENG	272	Children's Lit	3	Sp	ENG 101
ENG	276	Intro Nat Am Lit	5	W	ENG 101
HU	101	Intro Humanities	5	F,W,Sp	none
HU	102	Greeks to Renaiss	5	W	none
HU	103	Renaiss - Mod Day	5	Sp	none
HU	110	Art Apprec	3	F	none
HU	111	Survey Art History	5	F	none
HU	112	Hist Modern Art	5	F,W,Sp	none
HU	125	Spec Studies Hum	1-2	F,W,Sp	none
HU	200	HU COOP	3-6	A	permission
HU	241	Great Books	3	Sp	ENG 101
HU	242	Great Books	3	F	ENG 101
HU	272	Intro Shakespeare	3	Sp	ENG 101
HU	275	Philosophy in Lit	5	A	ENG 101

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable.

ETHNIC MINORITY HEALTH & HUMAN SERVICES

School of Continuing & Community Education

Division of Continuing Education

Construction Trades Building, Room 234 967-4525

Coordinator Robert Velasquez

The Program

The Ethnic Minority Health & Human Services majors learn to provide paraprofessional services for emotionally, economically or socially disadvantaged persons.

Students are trained in the classroom early in the program, and in both classroom and a required field setting later in the program. Some field training may be with Valley Mental Health and takes place at several locations. Types of mental health facilities (where this on-site work occurs) include residential, out-patient, children and adolescent, and/or day treatment services.

The goal of the program is to place individuals in one of a broad array of social service occupations, such as working with individuals, children, families, community agencies, private corporations or with insurance carriers.

A secondary goal of the training program is to provide articulation with the Bachelor of Science and/or Arts sociology degree at the University of Utah.

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete the program. Any preparatory skills class may be waived if equivalent skill can be demonstrated.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Option

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost for books and supplies: $250-$350

NOTE: Ethnic Minority Health & Human Services training program is open to anyone interested in working and learning about Human Services. You need not be a member of a minority group to apply.

ASSOCIATE OF SCIENCE DEGREE

(Minimum 100 Credit Hours Required)

Suggested First Quarter

Courses may be taken in any order as long as prerequisite requirements are met. SOC 101 should be taken early in program.

Course			Cr	Taught*	Prerequisites
General Requirements (51 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (49 credits)

Core Professional (19 credits)

Required

___ PSY	140	Prsnl G & D	3	F,W,Sp	none
___ PSY	150	Human G & D	5	A	none
___ SOCC	275	Ethics & Prof	3	F,W	SOC 101, permission
___ **Electives** (choose 2 courses)					
COM	120	Prcpl Pub Spkg	4	A	none
COM	122	Sm. Gp Coms	4	Sp	COM 101 or COM 110
COM	211	Interpsnl Com	4	F	COM 101 or COM 110
COM	213	Interviewing	4	W	COM 101 or COM 110

Cross Cultural Sensitivity (14 credits)

Required

___ SOC	101	Introd to Soc	5	A	none
___ SOCC	263	Ethnic Minrtys	3	TBA	SOC 101
___ **Electives** (choose 2 courses)					
SOCC	232	Work and Soc	4	TBA	SOC 101
SOCC	250	Native Am**	3	F	SOC 101
SOCC	258	Asian Am**	3	Sp	SOC 101
SOCC	266	Black Comm**	3	W	SOC 101
SOCC	267	Mexican Am	3	TBA	SOC 101
SOCC	269	Soc of Poverty	3	Sp	SOC 101

Service Application (a minimum of 16 credits)

Required

___ SOCC	220	Soc Psychology	3	W,Sp	SOC 101
___ SOCC	272	Soc Mntl Hlth	4	TBA	PSY 101
___ SOCC	293	Soc Internship	1-5	A	SOC 101, 2.0 GPA & permission
___ **Electives** (choose 2 courses)					
CJ	236	Juv Law & Proc	3	W	permission or CJ 133
ECD	110	Child G & D	5	F	none
LS	110	Nutrition	3	A	none
SOCC	268	Soc of Aging	3	W	SOC 101
SOCC	292	Soc Practicum	3	TBA	majors only
SS	125	Spc Stdy Soc S	1-2	TBA	permission

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

** It is suggested that students consult program coordinator for information on transferability of credits.

ASSOCIATE OF ARTS DEGREE

(Minimum 115 Credit Hours Required)

Suggested First Quarter

Courses may be taken in any order as long as prerequisite requirements are met. SOC 101 should be taken early in the program.

Course			Cr	Taught*	Prerequisites
General Requirements (51 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AA degree and list of courses in these fields)

Major Course Requirements (minimum of 49 credits)

Core Professional (19 credits)

Required

___ PSY	140	Prsnl G & D	3	F,W,Sp	none
___ PSY	150	Human G & D	5	A	none
___ SOCC	275	Ethics & Prof**	3	F,W	SOC 101, permission
___ 15 Consecutive hours of foreign languages)					

___ **Electives** (choose 2 courses)

COM	120	Prcl Pub Spkg	4	A	none
COM	122	Sm. Gp Coms	4	Sp	COM 101 or COM 110
COM	211	Interprsnl Com	4	F	COM 101, or COM 110
COM	213	Interviewing	4	W	COM 101 or COM 110

Cross Cultural Sensitivity (14 credits)
Required

___	SOC	101	Introd to Soc	5	A	none
___	SOCC	263	Ethnic Minor	3	TBA	SOC 101

___ **Electives** (choose 2 courses)

SOCC	232	Work and Soc	4	TBA	SOC 101
SOCC	250	Native Am**	3	F	SOC 101
SOCC	258	Asian Am**	3	Sp	SOC 101
SOCC	266	Black Comm**	3	W	SOC 101
SOCC	267	Mexican Am	3	TBA	SOC 101
SOCC	269	Soc of Poverty	3	Sp	SOC 101

Service Application (16 credits)
Required

___	SOCC	220	Soc Psychology	3	W,Sp	SOC 101
___	SOCC	272	Soc Mntl Hlth	4	TBA	PSY 101
___	SOCC	293	Soc Internship	1-5	A	SOC 101, 2.0 GPA & permission

___ **Electives** (choose 2 courses)

CJ	236	Juv Law & Proc	3	W	permission or CJ 133
ECD	110	Child G & D	5	F	none
LS	110	Nutrition	3	A	none
SOCC	268	Soc of Aging	3	W	SOC 101
SOCC	292	Soc Practicum	3	TBA	majors only
SS	125	Spc Stdy Soc S	1-2	TBA	permission

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

** It is suggested that students consult program coordinator for information on transferability of credits.

FASHION DESIGN MERCHANDISING

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 258 967-4106

Director Barbara Pomeranz

The Program

The Fashion Design Merchandising and Production program prepares students for entry-level retail or wholesale sales, management, retail buying, or entrepreneurial production of clothing or interior furnishing items. This proposed program trains students in product knowledge, the production and marketing of fashion oriented products. The proposed courses address both theory and practice. The program will support, not conflict with existing programs in marketing management and in production and will incorporate such existing courses as accounting, business statistics, small business management, principles of marketing, salesmanship, and personnel supervision.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books & Supplies

Estimated book and supply cost: $185

(continued on following page)

CERTIFICATE

Suggested First Quarter
Courses may be taken in any order as long as prerequisite requirements are met.

Course	Cr	Taught*	Prerequisites
Major Course Requirements			
___ FDMM 101 Intro Fash Bus	3	F,W,Sp	none
___ FDMM 102 Textiles	3	W, Sp	none
___ FDMM 103 Drsg for Sccss	3	F,W,Sp	none
___ FDMM 201 Hist Fashion	3	F,W	none
___ FDMM 202 Fashion & HB	3	F,W	none
___ FDMM 203 Prob Solving	3	W,Sp	FDMM 101
___ FDMM 204 Fashion Dsply	3	F,W,Sp	none
___ FDMM 205 Fashion Illust	3	W,Sp	none
___ FDMM 206 Flat Patrn Dsgn	3	F,W,Sp	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

FINANCE AND CREDIT

School of Business and Technology
Division of Business Systems
Business Building Room 105 967-4325

Faculty

Professors: Ree Erickson, K.T. Magnusson, Don Smith; *Assistant Professors:* A. Marlon Andrus, Joseph R. Howell Jr.; *Instructor*: Dennis Wilson

The Program

The need for sound financial management will grow because money is the life-blood of every business and organization. The course work offered will help prepare students for various career paths including the financial service industry (banks, savings and loans, credit unions, mortgage and thrift companies, etc.), commercial and retail credit analysis, credit granting, and collections. In addition, finance and credit majors can apply their skills in other areas such as cash management, insurance, real estate, brokerage and investment activities, personal financial planning, corporate finance and other elements of financial management. Emphasis is given to training in accounting, computer applications, economics, business management, credit and collections, credit management, credit analysis, and credit law. ***If students desire to transfer to a four-year college they should pursue the Associate of Science Degree.***

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program. The classes designed to assist students in reaching the skill level necessary to enter the certificate and degree programs are: BUS 080 (Business Math), BUS 101 (Business English), CIS 102 (Computer Information Systems), OIS 108 (WordPerfect for Non-OIS Majors). Any class in the preparatory skills may be waived if the student can demonstrate equivalent skill.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. Credit earned from FIN 200 is applied toward graduation requirements as Business Elective credit.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost for books and supplies: $100 - $125 per quarter

CERTIFICATE

(Minimum 52 Credit Hours Required)

Suggested First Quarter			Credits
FIN	120	Personal Finance	4
FIN	138	Financial Math	5
MGT	101	Introduction to Business	4

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ ACCT	101	Elem Acct I	4	A	FIN 138 or w/FIN 138
___ ACCT	102	Elem Acct II	4	A	ACCT 101, FIN 138
___ BUS	115	Bus Com	3	A	BUS 101, ENG 101
___ CIS	140	Bus Cmptr Apl	3	A	ACCT 101, CIS 102
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	Eng Comp	4	A	pre-test
___ FIN	120	Prsnl Finance	4	A	none
___ FIN	121	Prcpl Banking	3	F,W,Sp	none
___ FIN	138	Fin Math	5	A	pre-test
___ MGT	101	Intro to Bus	4	A	none
___ MGT	160	Prcpl of Supv	5	A	none
___ MGT	205	Lgl Envr Bus	5	A	none
___ MKTG	103	Intro to Mrktg	5	A	none

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 102 Credit Hours Required)

Suggested First Quarter			Credits
FIN	120	Personal Finance	4
FIN	138	Financial Math	5
MGT	101	Introduction to Business	4

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ FIN	138	Fin Math	5	A	pre-test
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (73 credits)

___ ACCT	101	Elem Acctg I	4	A	FIN 138 or w/FIN 138
___ ACCT	102	Elem Acctg II	4	A	ACCT 101, FIN 138
___ BUS	115	Bus Com	3	A	BUS 101, ENG 101
___ BUS	230	Bus Rpt Wrtg	3	F,W,Sp	BUS 115
___ CIS	140	Bus Cmptr Apl	3	A	ACCT 101, CIS 102
___ ECN	201	Macro Ecn	4	A	MGT 101
___ ECN	202	Micro Ecn	4	A	MGT 101
___ FIN	120	Prsnl Finance	4	A	none
___ FIN	121	Prcpl Banking	3	F,W,Sp	none
___ FIN	203	Mgrl Finance	5	F	ACCT 102, CIS 140
___ FIN	204	Money Bnkg	5	W	ECN 201, MGT 101
___ FIN	221	Credit & Col	3	A	ACCT 101, MGT 101
___ FIN	222	Credit Analysis	3	F,W	ACCT 102, FIN 138 FIN 221
___ FIN	223	Credit Mgt	3	W,Sp	FIN 222
___ FIN	224	Credit Law	3	F,Sp	BUS 230, FIN 221, MGT 105
___ MGT	101	Intro to Bus	4	A	none
___ MGT	160	Prcpl of Sup	5	A	none
___ MGT	205	Lgl Envr Bus	5	A	none
___ MKTG	103	Intro to Mrkg	5	A	none
___ **Electives**					
ACCT	103	Cost Analysis	4	A	ACCT 102
ACCT	203	Mgrl Acctg	4	A	ACCT 102
CST	101	Customer Serv	3	A	none
FIN	200	F&C CO-OP	3-6		soph & permission
FIN	210	Investments	4	F,Sp	FIN 120, FIN 138 MGT 101
FIN	220	Fin Planning	4	Sp	FIN 120
FIN	299	Crt Tpcs F&C	1-3	F,Sp	none

*A= All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF SCIENCE DEGREE

(Minimum 96 Credit Hours Required)

Students desiring to transfer to four-year colleges should pursue this degree.

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	105	Business Law I	5

Course			Cr	Taught*	Prerequisites
General Requirements (52 credits)					
Core Academic Skills					
___ CIS	102	CIS Intro	4	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
or					
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (45 credits)

___	ACCT 101	Elem Acct I	4	A	FIN 138 or w/FIN 138
___	ACCT 102	Elem Acct II	4	A	ACCT 101, FIN 138
___	ACCT 203	Mgrl Acct	4	A	ACCT 102
___	BUS 115	Bus Com	3	A	BUS 101, ENG 101
___	BUS 215	Calc for Bus**	4	A	MTH 105
___	ECN 201	Macro Ecn	4	A	MGT 101
___	ECN 202	Micro Ecn	4	A	MGT 101
___	FIN 138	Fin Math	5	A	pre-test
___	MGT 205	Lgl Envr Bus	5	A	none
___	MGT 220	Bus Statistics I	4	A	MGT 101, MTH 101
___	MGT 230	Bus Statistics II	4	A	MGT 220, MTH 105

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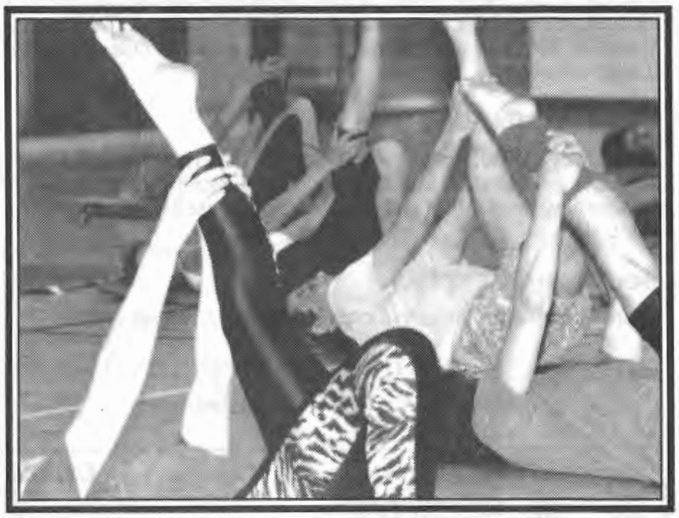
** BUS 215 is not required for Business Education and Marketing Education majors at some four-year universities and colleges.

☞ COM 120, PSY 101 and SOC 101 are recommended if transferring to the University of Utah. (One course in philosophy must be taken after transferring there.)



FINE ARTS

School of Humanities and Sciences
Division of Humanities
Administration Building Room 210 967-4338

Faculty
Assistant Professor: Suzanne McKenna

The Program
The Fine Arts Department includes courses in art, theatre, dance and music. The courses are designed to help the student create or perform in any of the individual disciplines or to introduce the student to one of these arts. The student interested in a course that covers the arts in their historical and societal contexts should refer to the Humanities Department.

There are other Fine Arts courses in development in association with the School of Continuing and Community Education; check the current schedule for these offerings.

Prerequisites
It is the student's responsibility to examine each course description for details of prerequisites for each class. Those prerequisites must be satisfied before the designated class may be taken.

Books and Supplies
Cost for supplies and texts are comparable with other general education classes at approximately $30 per text.

DEPARTMENTAL OFFERINGS
(Courses administered by the Fine Arts department)

Course			Cr	Taught*	Prerequisites
ART	160	Begin Pottery	2	TBA	none
ART	163	Hand Pottery	2	TBA	none
ART	165	Inter Pottery	2	TBA	ART 160, perm
ART	171	Begin Wtrclr	3	F,Su	none
ART	172	Begin Oil	3	W,Sp	none
ART	181	Inter Wtrclr	3	Sp,Su	ART 171
ART	182	Inter Oil	3	F,W	ART 172
ART	250	Art Elem Teach	3	F	none
ART	265	Adv Pottery	2	TBA	ART 165, permission
DNC	185	Beg Mod Dance	1	F,W,Sp	none
DNC	186	Inter Mod Dance	1	W,Sp	DNC 185, permission
DNC	195	Begin Jazz Dance	1	A	none
DNC	196	Inter Jazz Dance	1	A	DNC 195, permission

DNC	197	Adv Jazz Dance	1	TBA	DNC 195, permission
FA	110	Art Appreciation	3	F	none
FA	125	Spec Studies	1-2	TBA	permission
MUS	105	Music & Culture	5	F,W,Sp	none
MUS	121	Mus thru Ren	3	TBA	none
MUS	122	Mus thru Beeth	3	TBA	none
MUS	123	Mus thru20th Cent	3	TBA	none
MUS	125	Spec Studies	1-2	TBA	permission
MUS	142	Mus Elem Teach	3	F	none
THE	101	Survey of Theater	5	A	none
THE	214	Crt Analysis Film	4	TBA	FLMM/THEE 105 or 107
THE	220	Musical Theater	3	TBA	THE 111 or perm

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

FLIGHT TECHNOLOGY

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 254 967-4201

Director
George Van De Water

The Program
☞ This is a proposed program in process of development and review.

The Flight Technology Program is designed to provide flight training combined with technical/management courses important for careers in the aviation and aerospace industries. The flight instruction will be done by qualified instructors of Salt Lake Air Service, under the supervision of a Chief Flight Instructor. Salt Lake Air Service is an FAA 141 licensed flight school under contract with Salt Lake Community College to provide the in-flight portion of the program.

Students completing the program will receive an AS Degree and will be eligible to enter Utah State University's Aerospace Technology Program at the Junior level. Students may also enroll in a Certificate Program.

Preparation Note
There are some physical conditions (FAA Class II medical examination required) which may prevent certification. Students should check with the Division or Salt Lake Air Service BEFORE registering if they feel there may be a problem.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete the program.

Prerequisites
It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability
The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications by varying enrollment.

Books and Supplies

Estimated book and supply cost for the ITEE courses is $161.00. In addition to tuition, students will pay standard flight fees as shown in course descriptions. These fees may vary based on the type of aircraft and actual flying time.

CERTIFICATE

(Minimum 22 Credit Hours Required)

Suggested First Quarter			Credits
ITEE	233	Private Pilot Ground School	5
ITEE	234	Solo Flight	1
(Courses may be challenged)			

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ AVI	110	Intro Avionics	4	W,Su	ELET 102 or 103
___ ITEE	233	Plt Ground Sch	5	A	none
___ ITEE	234	Solo Flight	1	A	w/ITEE 233
___ ITEE	235	Priv Pilot Cert	1-3	A	ITEE 233/234/perm
___ ITEE	251	Inter Flight	2	A	ITEE 235
___ ITEE	252	Cmrcl Plt GS 1	3	A	ITEE 235 /valid PPC
___ ITEE	253	Cmrcl Plt GS 2	3	A	ITEE 252
___ ITEE	254	Instrmntn Cert	3	A	w/ITEE 252 or perm

ASSOCIATE OF SCIENCE DEGREE

(Minimum 100 Credit Hours Required)

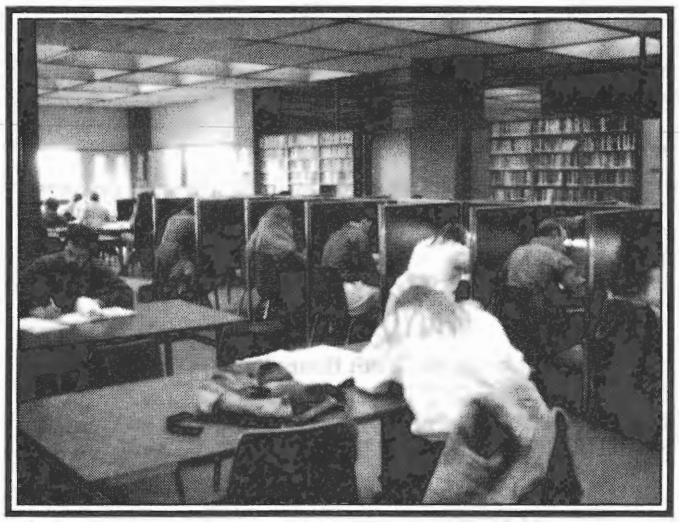
Suggested First Quarter			Credits
ENG	101	English Composition	4
CL	101	Basic Computer Concepts	3
COM	110	Organizational & Interpersonal Communication	3
ITEE	233	Private Pilot Ground School	5
ITEE	234	Solo Flight	1
(ITEE courses may be challenged)			

Course			Cr	Taught*	Prerequisites
General Requirements (51 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (25 credits)					
Required					
___ AVI	103	Arcrft Fmlizn	3	W,Su	none
___ AVI	110	Intro Avionics	4	W,Su	ELET 102 or 103
___ ITEE	233	Plt Ground Sch	5	A	none
___ ITEE	234	Solo Flight	1	A	w/ITEE 233
___ ITEE	235	Priv Pilot Cert	1-3	A	ITEE 233/234/perm
___ ITEE	251	Inter Flight	2	A	ITEE 235
___ ITEE	252	Cmrcl Plt GS 1	3	A	ITEE 235/valid PPC
___ ITEE	253	Cmrcl Plt GS 2	3	A	ITEE 252
___ ITEE	254	Instrmntn Cert	3	A	w/ITEE 252 or perm
___ **Electives** (take 24 credits)					
ELET	101	Bsc Eletr (DC)	6	A	none
ELET	102	Bsc Eletr (AC)	6	A	none
MTH	106	Plane Trig	5	A	MTH 105
MTH	111	Calculus I	5	A	MTH 106
PHY	171	Engr Physics I	4	F,W	MTH 111 w/PHY 181
PHY	172	Engir Physics II	4	W,Sp	PHY 171 w/PHY 182

Any courses from SLCC's Aviation Maintenance Technician (AMT) and the Army or Air Force ROTC programs may also be used as electives.



GENERAL STUDIES

School of Humanities and Sciences
Division of Sciences
Technology Building Room 416 967-4150

The General Studies AS Degree is designed for those who seek to transfer to a baccalaureate program but have an undefined major. The degree is also appropriate for students who need a composite undergraduate experience for transfer to a specific baccalaureate program.

The AS Degree in General Studies requires a minimum of 101 credit hours of transferable credit with a cumulative grade point average of 2.0 or better. (2.5 or better is recommended) The elective hours may be chosen to coincide with the students' chosen emphasis.

Preparation Note
Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites
It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability
The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

ASSOCIATE OF SCIENCE DEGREE

(Minimum 101 Credit Hours Required)

Suggested First Quarter
Courses may be taken in any order as long as prerequisite requirements are met.

Course				Cr	Taught*	Prerequisites
General Requirements (51 credits)						
Core Academic Skills						
___	CL	101	Bsc Cmptr Cpts	3	A	none
___			Communications	3	A	none
___	ENG	101	English Comp	4	A	pre-test
___	ENG	102	English Comp	4	A	ENG 101
___	MTH	105	Col Algebra	5	A	MTH 101
___	PE		Physical Educ	2	A	none
American Institutions						
___	HIS	170	American Civ	5	A	none
			OR			
___	POLI	110	Am Ntl Gov	5	A	none
General Education						
___	Biological Science			5	A	variable
___	Humanities			5	A	variable
___	Interdisciplinary Course			5	A	variable
___	Physical Science			5	A	variable
___	Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

General Studies Core (50 credits)

___ **Required** (take 30 credits) Choose from at least five areas:
- Biology
- Communications
- English
- Fine Arts
- Humanities
- Languages
- Literature
- Mathematics
- Physical Science
- Social Science

___ **Electives** (take 20 credits)
- Business
- Computer Science
- Health Science
- Pre-Engineering
- Technology
- Vocational

GRAPHIC DESIGN

School of Occupational Education
Division of Construction and Service Industries
Construction Trades Building Room 262 967-4074

Faculty

Professors: Grant Hulet, Allen Reinhold, Lois Snyder; *Associate Professors:* Doug Jordan, Fred Van Dyke; *Instructors:* Richard Graham, Lana Hall, Terry Martin, Bonnie Oswald, Steven Taft

The Program

The Graphic Design department prepares the student for jobs in the exciting graphic design industry. Graphic designers produce artwork for advertising and publishing. They create illustrations for advertisements, books, magazines, posters, record covers, and billboards. They also plan combinations of words and pictures (layout), create symbols for corporations (logo design), choose and alter type styles (typography) and prepare art to be printed (art production). Related areas include package design, screen printing, computer graphics, and cartooning. Creative people with an aptitude in drawing, design and visual communications should consider this expanding and competitive field.

Students in Graphic Design may specialize in three general areas: Design, Illustration, and Computer Graphics, and may earn either a Diploma or an Associate of Science Degree.

Students should expect their progress to be reviewed from time to time by department faculty. Students whose progress is not satisfactory will be counseled and/or given probationary status.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Students with previous college credits should have transcripts sent to the office of the chairman of the Division of Construction and Service Industries (CT 262). Students who feel they already have the skills and knowledge for any course may challenge the course by completing a test devised by the instructor. The student must register for the course before challenging.

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of Advisor and/or Division Chair.

Cooperative Education credit may be earned in lieu of some of the laboratory classes for completion of graduation requirements. If the laboratory learning objectives are completed on the job, they may be validated through on-site visits by a faculty CO-OP coordinator.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

DIPLOMA

(Minimum 96 Credit Hours Required)

Suggested First Quarter			Credits
COM	110	Organizational & Interpersonal Communications	3
GD	114	Drawing I	5
GD	116	Principles and Elements of Art	3
GD	135	Typography I	3
GD	205	Portfolio Planning	1

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
Required					
___ CL	101	Bsc Cptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ GD	114	Drawing I	5	F,W	none
___ GD	116	P & E of Art	3	F,W	none
___ GD	119	Prod Art I	3	W,Sp	none
___ GD	120	Prod Art II	3	Sp,Su	GD 119
___ GD	121	Math for GD	3	F,W,Sp	none
___ GD	122	Layout I	2	Sp,Su	GD 135
___ GD	123	Perspective	3	W,Sp	GD 114
___ GD	126	Figure Structure	3	W, Sp	GD 114
___ GD	127	Color	3	W,Sp	none
___ GD	128	Media	3	W,Sp	GD 114
___ GD	135	Typography I	3	Sp,Su	none
___ GD	136	Life Drawing	3	F,Sp	GD 126
___ GD	137	Design I	3	Sp,Su	GD 116
___ GD	139	DrawingII	3	Sp	GD 123
___ GD	146	Cmptr Prd Art I	2	A	CL 101
___ GD	204	Illustration I	3	W	GD128, 136
		or			
GD	239	Design II	3	W	GD 137
___ GD	205	Portfolio Plng	1	F,W	none
___ GD	213	Cmptr Prd A II	3	F,W,Sp	GD 146
___ GD	220	Cmptr Prd A III	3	W,Sp	permission
___ GD	227	Typography II	2	W	GD 135
___ GD	230	Layout II	3	W	GD 122
___ GD	237	Occp Orienta	2	W,Sp	2nd yr status
___ GD	267	Portfolio	1	Sp	2nd yr status
___ GD	268	Advtsng Wkshp	3	Sp	2nd yr status

___ **Electives** (24 credits required)
Any GD or FA course not used as major requirement credit may be used as elective credit. *See course descriptions.*

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 113 Credit Hours Required)

Suggested First Quarter			Credits
COM	110	Organizational & Interpersonal Communications	3
GD	114	Drawing I	5
GD	116	Principles and Elements of Art	3
GD	135	Typography I	3
GD	205	Portfolio Planning	1

Course			Cr	Taught*	Prerequisites
General Requirements (27 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (66 credits)

Required					
___ GD	114	Drawing I	5	F,W	none
___ GD	116	P & E of Art	3	F,W	none
___ GD	119	Prod Art I	3	W,Sp	none
___ GD	120	Prod Art II	3	Sp,Su	GD 119
___ GD	121	Math for GD	3	F,W,Sp	none
___ GD	122	Layout I	2	Sp,Su	GD 135
___ GD	123	Perspective	3	W,Sp	GD 114
___ GD	126	Figure Structure	3	W, Sp	GD 114
___ GD	127	Color	3	W,Sp	none
___ GD	128	Media	3	W,Sp	GD 114
___ GD	135	Typography I	3	F,W	none
___ GD	136	Life Drawing	3	F,Sp	GD 126
___ GD	137	Design I	3	Sp,Su	GD 116
___ GD	139	Drawing II	3	Sp	GD 123
___ GD	146	Cmptr Prd Art I	2	A	CL 101
___ GD	204	Illustration I	3	W	GD 128, 136
		OR			
GD	239	Design II	3	W	GD 137
___ GD	205	Portfolio Plng	1	F,W	GD 145
___ GD	213	Cmptr Prd Art II	3	F,W,Sp	GD 146
___ GD	220	Cmptr Prd A III	3	W,Sp	GD permission
___ GD	227	Typography II	2	W	GD 135
___ GD	230	Layout II	3	W	GD 122
___ GD	237	Occp Orientation	2	W,Sp	2nd yr status
___ GD	267	Portfolio	1	Sp	2nd yr status
___ GD	268	Advtsng Wkshp	3	Sp	2nd yr status

___ **Electives** (20 credits required)
Any GD course (or FA 112) not used as major requirement credit may be used as elective credit. *See course descriptions.*

SPECIALIZATION REQUIREMENTS

(Complete courses from one of the following specializations)

COMPUTER GRAPHICS SPECIALIZATION

The field of Graphic Design is changing rapidly largely due to the growing use of the computer. The computer does not replace art skills but is a tool used to augment these skills and make the graphics process more efficient and more cost effective. Students with art and design talent and an interest in computers should consider this area of specialization.

___ GD	145	PC's for Design	2	F,W	CL 101
___ GD	206	Paint Systems	3	F,W	GD 145
___ GD	207	Prsntn Grphcs	3	Sp,Su	GD 206
___ GD	210	Vector Graphics	3	W,Sp	GD 145
___ MKTG	103	Mrktg Prcpls	5	A	none

DESIGN SPECIALIZATION

Students who elect to specialize in design receive job entry training in various applications of graphic design and advertising layout. Graphic creativity and communication/selling analysis are integral to this program. Students interested in preparing for futures as art directors are encouraged to consider this area of specialization.

___ GD	145	PC's for Design	2	F,W	CL 101
___ GD	228	Screen Printing	2	F,W,Su	none
___ GD	233	Ad Typog	2	F	GD 227
___ GD	239	Design II	3	W	GD 137
___ GD	243	GD Trends	2	Sp	2nd year status
___ GD	252	Ad Layout	3	W	GD 230
___ GD	254	Pkg Design	2	Sp	GD 137
___ GD	262	Corporate Dsgn	2	W	GD 137
___ MKTG	103	Mrktg Prcpls	5	A	none

ILLUSTRATION SPECIALIZATION

This program will provide job entry level training for producing camera-ready art for reproduction in illustration. Specializations are: book covers, magazine story and spot illustrations in black and white, limited color, and full color. Students who are preparing for this area of specialization should acquire a high level of drawing skill.

___ GD	145	PC's for Design	2	F,W	CL 101
___ GD	204	Illustration I	3	W	GD 128, 136
___ GD	216	Illustration II	3	Sp	GD 204
___ GD	217	Illustration III	3	F	GD 216
___ GD	218	Illustration IV	5	W	GD 217
___ GD	229	Portrait Studies	2	F	GD128, 136
___ GD	243	GD Trends	2	Sp	2nd yr status
___ GD	250	Retail Illust	2	Sp	GD 123

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

HAZARDOUS MATERIAL TECHNICIAN

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 254 967-4201

Director George Van De Water

The Program

☞ This is a proposed program in process of development and review.

The Hazardous Material Technician Program is designed to meet the needs of three distinct groups of students.

The Hazardous Materials Technician Program is a 2-year vocational/ technical competency-based program, which upon completion will award an Associate of Applied Science (A.A.S.) Degree. The program will prepare individuals for entry-level jobs that provide technical support on handling hazardous material for an organization. Course content is designed to cover six quarters. (Anticipated start date is early 1991).

The Hazardous Materials Technician Certificate program consists of 35 credit hours. This program is suggested for those students who have an industrial background. Since various industrial processes are referred to in the hazardous materials regulations, students with an industrial background are better able to comprehend the curriculum content. (Anticipated start in Summer Quarter 1990)

The Asbestos Hazard Emergency Response Act, (AHERA), Asbestos Training Certificate Program is designed as a separate program which will meet federal training requirements for Asbestos Management Planners, Inspectors and Asbestos Workers. The anticipated start date for this phase is Winter Quarter, 1991.

Preparation Note

Students entering these programs should have a 10th grade proficiency in reading and writing skills and one year of high school algebra. Students who need to take preparatory classes to meet the requirements of first quarter courses should plan on extra time to complete the program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The students should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost is TBA

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 99 Credit Hours Required)

Suggested First Quarter			Credits
COM	110	Organizational & Interpersonal Communications	4
ENG	101	English Composition	4
IND	147	Math for Industry	5
HMT	101	Hazardous Materials Regulations I	3

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Inpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ IND	147	Math for Ind	5	F,W,Sp	permission
___ Reading		(determined by dept)		A	variable
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credits from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (34 credits)					
___ AHER	101	Mgt Planner	1	TBA	none
___ AHER	102	Asbest Insp Trg	1	TBA	none
___ CHEM	141	Elm Org Chem	5	W,Su	CHEM 140
___ HMT	101	Haz Mtrls Reg I	3	TBA	none
___ HMT	110	Ind Processes	3	TBA	w/HCEM 141
___ HMT	120	Haz Com Stnds	3	TBA	none
___ HMT	130	Samp /Analysis	3	TBA	CHEM 141
___ HMT	210	Emerg Resp I	3	TBA	none
___ HMT	220	Haz Mtrls Rec	3	TBA	CHEM 141
___ HMT	230	Haz Mtrls Reg	3	TBA	HMT 101
___ HMT	240	Emerg Resp II	3	TBA	HMT 210
___ HMT	280	Haz Mtrls Hlth	3	TBA	BIOL 205, 206

___ **Electives** (take 36 credits)
These courses will be selected by the student subject to the approval of the Academic Advisor.

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

Suggested First Quarter
Course for the Certificate programs below may be taken in any order as long as prerequisite requirements are met.

HAZARDOUS MATERIALS TECHNICIAN

CERTIFICATE

(32 Credit Hours Required)

Course	Cr	Taught*	Prerequisites
Major Course Requirements			
___ CHEM141 Elm Org Chem	5	W,Su	CHEM 140
___ HMT 101 Haz Mtrls Reg I	3	TBA	none
___ HMT 110 Indust Processes	3	TBA	w/CHEM 141
___ HMT 120 Haz Com Stnds	3	TBA	none
___ HMT 130 Samp /Analysis	3	TBA	CHEM 141
___ HMT 210 Emerg Resp I	3	TBA	none
___ HMT 220 Haz Mtrls Rec	3	TBA	CHEM 141
___ HMT 230 Haz Mtrls Reg	3	TBA	HMT 101
___ HMT 240 Emerg RespII	3	TBA	HMT 210
___ HMT 280 Haz Mtrls Hlth	3	TBA	BIOL 205, 206

ASBESTOS MANAGEMENT

CERTIFICATE

(2 Credit Hours Required)

Course	Cr	Taught*	Prerequisites
Major Course Requirements			
___ AHER 101 Mgt Planner	1	TBA	none
___ AHER 102 Asbest InspTrg	1	TBA	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

HEAVY DUTY MECHANICS

School of Occupational Education
Division of Mechanics
Auto Trades Building Room 206 967-4138

Faculty

Professor: John A. Larson; *Instructors:* Ray B. Court, Hyrum Smith

The Program

The student learns the general background in the Heavy Duty Mechanics program.

Heavy-duty mechanics repair and maintain diesel equipment, such as heavy duty trucks and buses, construction equipment, which includes bulldozers, earth movers, and cranes and other diesel-power equipment.

Diesel or heavy-duty mechanics use common hand tools like pliers, wrenches, and screwdrivers, as well as special tools. They may also use testing equipment like dynamometers--which measure engine power--and special fuel injection equipment.

Most diesel mechanics are required to buy their own hand tools. A beginner accumulates more tools as he/she gains experience. A prospective diesel mechanic should be in good physical condition and have above-average mechanical ability and eye-hand coordination.

Special Requirements

The student will need basic reading and math skills. Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Job Information

Students will receive placement assistance to find jobs that relate to their competencies.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

If a student is employed in a job involving Heavy Duty Mechanics, it is possible to earn some laboratory credit through Cooperative Education.

With prior approval of a teaching faculty member and the faculty CO-OP coordinator for the Division of Mechanics, the student would register for the regular laboratory course. (A "Section 80" designation identifies that credit is being earned through CO-OP.)

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost for tools and supplies: $1,025
Estimated cost for books per quarter: $65

DIPLOMA

(Minimum 98 Credit Hours Required)

*Suggested First Quarter***			Credits
HDM	114	Chassis Lab	7
HDM	115	Chassis Theory	5
IND	147	Math for Industry	5
		or	
HDM	122	Basic Diesel Lab	7
HDM	123	Basic Diesel Theory	5
MT	120	Basic Machine Practice	3
		or	
HDM	134	Preventive Maintenance Lab	7
HDM	135	Preventive Maintenance Theory	5
WLD	107	Welding	6

** Students wishing to enter classes other than the suggested classes may be able to do so with the approval of the instructor.

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
Required					
___ COM	110	Org Intpl Com	3	A	none
___ HDM	114	Chassis Lab	7	W,Sp	w/HDM 115
___ HDM	115	Chassis Thry	5	W,Sp	w/HDM 114
___ HDM	122	Bsc Diesel Lab	7	F,Sp	w/HDM 123
___ HDM	123	Bsc Diesel Thry	5	F,Sp	w/HDM 122
___ HDM	134	P Mntnc Lab	7	F,W	w/HDM 135
___ HDM	135	P Mntnc Thry	5	F,W	w/HDM 134
___ HDM	202	HD Elec Lab	7	F	HDM 114,115, HDM122,123 HDM 134,135 & w/HDM 203
___ HDM	203	HD Elec Thry	5		w/HDM 202
___ HDM	222	Adv Diesel Lab	7	W	HDM 122,123 & w/HDM 223
___ HDM	223	Adv Diesel Thry	5	W	w/HDM 222
___ HDM	230	HD Hyd Lab	7	Sp	HDM 114,115 HDM 122,123 & w/HDM 231
___ HDM	231	HD Hyd Thry	5	Sp	w/HDM 230
___ IND	108	Ind Eltrn	2	F,W,Sp	none
___ IND	147	Math for Ind	5	W,Sp	permission
___ LE	122	Career Dev	3	A	none
___ MACH	120	Rel Machine Shp	3	F,W,Sp	none
___ PTM	110	Prcpl of Tech I	4	TBA	none
___ WLD	107	Welding	6	F,W,Sp	none
Electives					
___ HDM	210	Cmptr Eltrn & Fuel Sys Lab	7	Sp	5 qtrs of HDM & w/HDM 211
___ HDM	211	Cmptr Eltrn & Fuel Sys Thry	5	Sp	5 qtrs of HDM & w/HDM 210

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 119 Credit Hours Required)

*Suggested First Quarter***			Credits
HDM	114	Chassis Lab	7
HDM	115	Chassis Theory	5
IND	147	Math for Industry	5
		or	
HDM	122	Basic Diesel Lab	7
HDM	123	Basic Diesel Theory	5
MT	120	Basic Machine Practice	3
		or	
HDM	134	Preventive Maintenance Lab	7
HDM	135	Preventive Maintenance Theory	5
WLD	107	Welding	6

** Students wishing to enter classes other than the suggested classes may be able to do so with the approval of the instructor.

Course			Cr	Taught*	Prerequisites
General Requirements (36 credits)					
Core Academic Skills					
COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ IND	147	Math for Ind	5	W,Sp	none
___ LE	122	Career Dev	3	A	none
___ PTM	110	Prcpl of Tech I	4	TBA	none
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (83 credits)

Required					
___ HDM	114	Chassis Lab	7	W,Sp	w/HDM 115
___ HDM	115	Chassis Thry	5	W,Sp	w/HDM 114
___ HDM	122	Bsc Diesel Lab	7	F,Sp	w/HDM 123
___ HDM	123	Bsc Diesel Thry	5	F,Sp	w/HDM 122
___ HDM	134	P Mntnc Lab	7	F,W	w/HDM 135
___ HDM	135	P Mntnc Thry	5	F,W	w/HDM 134
___ HDM	202	HD Elec Lab	7	F	HDM 114,115, HDM122,123 HDM 134,135 & w/HDM 203
___ HDM	203	HD Elecl Thry	5	F	w/HDM 202
___ HDM	222	Adv Diesel Lab	7	W	HDM 122,123 & w/HDM 223
___ HDM	223	Adv Dsl Thry	5	W	w/HDM 222
___ HDM	230	HD Hyd Lab	7	Sp	HDM 114,115 HDM 122,123 & w/HDM 231
___ HDM	231	HD Hyd Thry	5	Sp	w/HDM 230
___ IND	108	Ind Eltrn	2	F,W,Sp	none
___ MACH	120	Rel Machine Shp	3	F,W,Sp	none
___ WLD	107	Welding	6	F,W,Sp	none
Electives					
HDM	210	Cmptr Eltrn & Fuel Sys Lab	7	Sp	5 qtrs of HDM & w/HDM 211
HDM	211	Cmptr Eltrn & Fuel Sys Thry	5	Sp	5 qtrs of HDM & w/HDM 210

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

HEAVY DUTY MECHANICS

Suggested First Quarter
This is an open entry/open exit program. Students may enroll anytime during the first three weeks and complete when they meet the educational objectives. *The hours completed do not apply toward other college programs.*

General Information

Heavy duty mechanics use common hand tools like pliers, wrenches and screw drivers as well as special testing and measuring equipment.

Special Requirements

Good physical condition and above average eye-hand coordination. Most heavy duty mechanics are required to buy their own hand tools when they enter the job market.

Job Information

Repair and maintain diesel equipment such as heavy duty trucks, buses and construction equipment using hand tools and test equipment.

Course of Study

Students will complete three of the training units and Job Club

Courses	Hours
Preventive Maintenance Lab and Theory	265
Basic Diesel Engines Lab and Theory	265
Chassis Lab & Theory	265
Heavy Duty Hydraulics Lab & Theory	265
Job Club	60
TOTAL HOURS	**855**

☞ For Heavy Duty Equipment Operation, see the Division of Continuing and Community Education

HORTICULTURE TRAINING

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 254 967-4070

Director
Bill Laney

Horticulture involves the plant growing industry. Course work includes classes on the maintenance of yards and commercial areas, insect and disease control, uses of ornamental plants, landscape design and greenhouse operations.

The Program

The program is designed to help students step directly into responsible jobs in the horticultural industry. Typical employment could include landscape maintenance (residential, commercial, parks, golf course, etc.), nursery/garden store retail sales, landscape design, greenhouse operations and as pest control operators.

Job opportunities are currently good along the Wasatch Front with entry level salaries between $5 and $10 per hour. Jobs are available for full time and for seasonal workers.

A certificate is available upon completion of the course work. Non credit options are available for the hobbyist. Home gardeners who would like to sharpen their skills will also find the classes beneficial.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies
Approximate cost $155

CERTIFICATE

(Minimum 12 Credit Hours Required)

Suggested First Quarter	
HORT 101 Landscape Plants and Their Use	3
HORT 102 Maintaining the Landscape	3

Course		Cr	Taught*	Prerequisites
Major Course Requirements				
___ HORT 101	Landscape Plants	3	F,Sp	none
___ HORT 102	Maint Landscape	3	F,Sp	none
___ HORT 103	Greenhouse Opr	3	F,Su	none
___ HORT 103L	Grnhse Lab	0	F,Su	w/HORT 103
___ HORT 104	Insct /Pl Diseases	3	F,Su	none
___ HORT 105	Grow Fruits/Veg	3	Sp	none
Electives				
___ HORT 109	Beg Floral Arrg	2	F,W,Sp	none
___ HORT 110	Beekeeping	2	TBA	none

INTERIOR DESIGN

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 258 967-4106

Director Barbara Pomeranz

The Program

The Interior Design program trains students for a variety of design positions. After successful completion of the ten required classes outlined, students are awarded an Interior Design Certificate from Salt Lake Community College.

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter should plan on extra time to complete a certificate.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $100

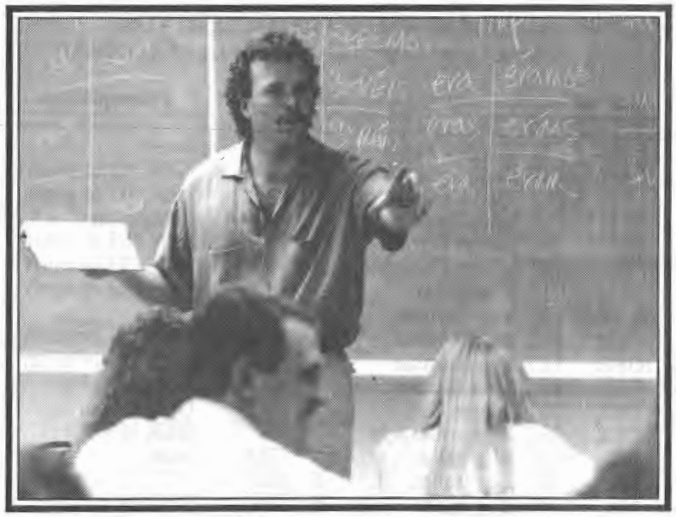
CERTIFICATE

(Minimum 33 Credit Hours Required)

Suggested First Quarter			Credits
IDD	150	Introduction to Design I	3
IDD	153	Design Sales	3
IDD	154	Historical Furnishings	3
IDD	161	Space Utilization I	3

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ FDMM	102	Textiles	3	W,Sp	none
___ IDD	150	Intro to Dsgn I	3	F,W	none
___ IDD	151	Intro to Dsgn II	3	W,Sp	none
___ IDD	152	Dsgn Business	3	W,Sp	none
___ IDD	153	Dsgn Sales	3	F,W	none
___ IDD	154	Historical Furn	3	F,W	none
___ IDD	155	Contemp Furn	3	W,Sp	none
___ IDD	160	Dsgn & Archit	3	F,Sp	none
___ IDD	161	Space Utlztn I	3	F,W	none
___ IDD	162	Space Utlztn II	3	F,Sp	none
___ IDD	200	Intr Dsgn Intern	3	TBA	IDD 150,152 (optl)

******A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



LANGUAGES

School of Humanities and Sciences
Division of Humanities

Administration Building Room 210 967-4338

Faculty

Instructor: Jonathan Stowers

The Program

The Language Department teaches beginning skills in several languages. The classes are designed to help the student to learn or improve communication skills in a second language. These skills include speaking, reading, and writing as well as awareness of cultural differences and heritage.

The Department offers a full two-year program each in Spanish and French which allows fulfillment of the requirements for a four-year degree. There are other languages in development in association with the School of Continuing and Community Education, check the current schedule for these offerings.

However, for the student already proficient in the language, it is possible to enroll in one of the more advanced courses, with instructor permission. Upon completion of that course with a grade of B or higher, the student can petition for credit for the courses bypassed. Other options may be available; contact the department.

In accordance with the requirements for the AA degree in Humanities, the first year of language courses are to be taken in sequence unless the college is not able to offer them sequentially due to enrollment proscriptions.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisites for each class. Those prerequisites must be satisfied before the designated class may be taken. *While not a prerequisite, it is suggested that the student complete English 101 before beginning study in a second language.*

Books and Supplies

Cost for supplies and texts are comparable with other general education classes at approximately $30 per text.

DEPARTMENTAL OFFERINGS

(Courses administered by the Language department)

Course			Cr	Taught*	Prerequisites
FRN	101	Begin French	5	A	none
FRN	102	Begin French	5	A	FRN 101 or perm
FRN	103	Begin French	5	A	FRN 102 or perm
FRN	125	Spec Studies	1-3	TBA	permission
FRN	201	Interm French	5	F	FRN 103 or equiv
FRN	202	Interm French	5	W	FRN 103 or equiv
FRN	275	French Lit	5	Sp	FRN 103 or equiv
GER	101	Beg German	5	A	none
GER	102	Beg German	5	A	GER 101 or perm
GER	103	Beg German	5	A	GER 102 or perm
GER	125	Spec Studies	1-3	TBA	permission
GER	201	Interm German	5	F	GER 103 or equiv
GER	202	Interm German	5	W	GER 103 or equiv
ITL	101	Beg Italian	5	TBA	none
ITL	102	Beg Italian	5	TBA	ITL 101 or perm
ITL	103	Beg Italian	5	TBA	ITL 102 or perm
JPN	101	Beg Japanese	5	TBA	none
JPN	102	Beg Japanese	5	TBA	JPN 101 or perm
JPN	103	Beg Japanese	5	TBA	JPN 102 or perm
POR	101	Beg Portuguese	5	TBA	none
POR	102	Beg Portuguese	5	TBA	POR 101 or perm
POR	103	Beg Portuguese	5	TBA	POR 102 or perm
RUS	101	Beg Russian	5	TBA	none
RUS	102	Beg Russian	5	TBA	RUS 101 or perm
RUS	103	Beg Russian	5	TBA	RUS 102 or perm
SPN	101	Begin Spanish	5	A	none
SPN	102	Begin Spanish	5	A	SPN 101 or perm
SPN	103	Begin Spanish	5	A	SPN 102 or perm
SPN	125	Spec Studies	1-3	Su	permission
SPN	201	Interm Spanish	5	F	SPN 103 or equiv
SPN	202	Interm Spanish	5	W	SPN 103 or equiv
SPN	275	Spanish Lit	5	Sp	SPN 103 or equiv

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

LAW ENFORCEMENT ACADEMY

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 254 967-4056

Training Coordinator James Hoffman

The Law-100 and Law-200 (Peace Officer's Academy) are team-taught by instructors who are P.O.S.T. certified. The team includes selected members of the Academy training staff, local law enforcement agencies, and attorneys for both city and county agencies.

The Program

The 1985 Utah State Legislature altered statutes concerning law enforcement instructional programs. Four categories of training programs and certification became effective July 1, 1985: peace officers, correctional officers, reserve/auxiliary officers, and special function officers.

There are three separate programs which provide basic law enforcement instruction to meet the training requirements for the four categories shown above. The Peace Officer Standards and Training (P.O.S.T.) Council has approved curricula relating to each of these.

General Requirements

1. United States citizen.

2. Minimum age of 21 at time of admission to academy program.

☞ Certification must be awarded within one year from the date of course completion. Students must be at least 21 years of age when applying for these programs, or, birthday must fall during or prior to graduation.,

3. Have a High School Diploma or GED.

4. Pass a background investigation.

5. Free of any physical, emotional or mental conditions which might adversely affect the performance of duty as a peace officer as determined through a selection process.

☞ Students must pass post certified physical fitness tests to be accepted into the program.

The School of Continuing Education offers these programs on an as-needed basis.

Suggested First Quarter
Subject matter presented in set sequence for each course.
LAW 100 or equivalent must be taken before LAW 150 or LAW 200.

LAW - 100
Special Function Officer Course

The Program
This training course satisfies the certification training requirements for those who desire to become employed in the law enforcement fields of airport or campus security, constable service and a number of selected positions with various regulatory agencies. This program also meets the requirements for those who are interested in becoming reserve or auxiliary officers. The Law-100 training course currently consists of 160 hours of training over a nine week period.

Books and Supplies
Approximate book and supply cost: $200

Course Content
Legal, Patrol and Criminal Investigation subjects (Including Skill Areas):

Abnormal Behavior
Animal Control Problems
Career Orientation
Civil/Criminal Liability
Control Substance Law
Crime Prevention
Ethics/Professionalism
Handcuffing
Intro. to Criminal Justice System
Juvenile Law and Procedure
Laws of Evidence
Liquor Control Law
Minority Awareness
Patrol Concepts
Physical Fitness (participatory)
Reasonable Force
Related Law Enforcement/ Criminal Justice Agencies
Understanding Human Behavior
Utah Credit Exam (preparation)
Admin. of Criminal Justice
Arrest Control and Search
Child Abuse/Neglect
Constitutional Law
Criminal Code (Title 76,77)
Discretionary Decision Making
First Aid
Interpersonal Communications
Intro. to Vehicle Operations
Laws of Arrest
Laws of Search and Seizure
Media Relations
Note Taking/Study Skills
Physical Disablers - Prevention
Radio Communication
Report Writing/Field Notes
Searching Persons
Stress Management
Use of Force
Weight Control

LAW - 150
Correctional Officer Course

The Program
This course satisfies the certification training requirements for those who desire to become Correctional Officers at the city and/or county level. The Law-150 training course currently consists of a minimum of 80 hours of training over a four-week period.

Those desiring to enter this program must hold a valid Special Function Certification or must first complete the Law-100 course.

Books and Supplies
Approximate book and supply cost: $100

Course Content
Admission and Release
Chemical Agents
Correctional Law/ Offender Rights
Forced Call Entry
Head Counts
Hostage Taking & Negotiations
Inmate Grievance Procedures
Medical Operations
Riots and Disturbances
Staff/Inmate Relations
Tool Control
Call Search
Classification
Fire Safety
Food Service Control
Explosives
History of Corrections
Inmate Discipline Procedures
Key Control
Property Controls
Special Problem Prisoners
Supervision of Inmates
Use and Abuse of Force

LAW-200
Peace Officer Basic Course

The Program
The Law 200 Peace Officer's Basic Course is the final module of the two-part training program for Peace Officers in the State of Utah. To enter this program, applicants must hold a valid Special Function Certification or must first complete the Law 100 course.

This currently consists of 300 hours of law enforcement training over a fifteen (15) week period.

Books and Supplies
Approximate book and supply cost: $600

Course Content
Arrest Control, Communications, Criminal Investigation, Crisis Management, Patrol Procedures, Police Firearms, Physical Training, Traffic Control, Vehicle Operations.

Abnormal Behavior
Arrest Control and Search (adv)
Child Abuse/Neglect
Constitutional Law/Bill of Rights
Crime Prevention
Emergency Vehicle Operations
First Aid
Investigative Concepts (adv)
Laws of Arrest
Laws of Search and Seizure
Physical Disablers/Prevention
Parct Appl of Law Enforcement
Report Writing/Field Notes
Searching Persons
Traffic Tactics & Procedures
Utah State Certificate (preparation)
Admin. of Criminal Justice
Career Orientation
Civil/Criminal Liability
Control Substance Law
Criminal Code (Title 76, 77)
Firearms Safety & Combat
Handcuffing
Juvenile Law and Procedure
Laws of Evidence
Patrol Concepts (adv)
Physical Fitness (adv)
Reasonable Force (adv)
Rel. Law Enf. /Criminal Justice
Tactics & Procedures
Use of Force

IN-SERVICE TRAINING

The Academy offers in-service training and special workshops for individual departments. For information about upcoming programs, see the Continuing Education Schedule or call 967-4201.

LEGAL ASSISTANT (PARALEGAL) TRAINING

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 258, 967-4106

Director Barbara Pomeranz

The Program

Training for those considering employment as a paralegal, or updating and professional development for those already in the field. LAA classes are offered during the evening only. An Associate Degree program is pending, and ABA approval is in process.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program

Prerequisites

It is the student's responsibility to examine each course description for prerequisite classes. Prerequisites must be satisfied before the designated class may be taken.

Elective Options

With prior approval, a student working in a job related to Legal Assistant (Paralegal) Training may earn up to six hours of elective credit. See course descriptions for more details.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $350.00

CERTIFICATE

(Minimum 56 Credit Hours Required)

Suggested First Quarter		Credits
ENG	101	4
LAA	101	4

Course			Cr	Taught*	Prerequisites
Major Course Requirements (41 credits)					
Required					
___ ENG	101	Eng Comp	4	A	pre-test or ENG 099
___ ENG	102	Eng Comp	4	A	ENG 101
___ LAA	101	Paralegal Prof	3	A	none
___ LAA	102	Pre-Lgl Writing	3	A	ENG 101
___ LAA	103	Litigation	3	A	none
___ LAA	104	Legal Research I	3	A	ENG 101,102 w/LAA 106
___ LAA	106	Legal Writing I	3	A	ENG 101, 102, w/LAA 104
___ LAA	107	Crmnl L&P	3	F,W,Sp	none
___ LAA	108	Contracts	3	F,Sp,Su	none
___ LAA	112	Legal Assistance	3	A	LAA 101
___ LAA	114	Legal Research II	3	A	LAA 104, 106, w/LAA 115
___ LAA	115	Legal Writing II	3	A	LAA 104,105 w/LAA 114
___ LAA	132	Intrvwng&Ethcs	3	A	none
___ **Electives** (take 15 credits)					
LAA	107	Crmnl L&P	3	F,W,Sp	none
LAA	109	Business Law	3	F,Sp,Su	none
LAA	110	Bankruptcy	3	F,Sp,Su	none
LAA	111	Wills/Probates	3	F,Su	none
LAA	113	Admin Law	3	W	LAA 119
LAA	117	Domestic Law	3	W,Su	none
LAA	119	Constitl Law	3	A	none
LAA	125	Securities	3	Sp	none
LAA	130	Torts: Psnal Inj	3	A	none
LAA	134	Fund of Insurance	3	A	w/LAA 136
LAA	136	Liab. Claims Adj	3	TBA	w/LAA 134
LAA	200	Paralegal Coop	3-6	A	none
REE	153	Real Estate Law	3	F,W,Sp	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

LEGAL SECRETARY

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 258 967-4106

Director Barbara Pomeranz

The Program

The training is designed to assist in the development of a legal secretary whether he/she is currently employed in a law office or preparing for such a career. Emphasis is on the professional, rather than the purely routine or clerical, aspects of the work of the legal secretary. Courses help in development of the view that the legal secretary regards the position as a permanent profession, rather than a temporary occupation.

This training also assists in preparation for the professional legal secretary exam sponsored by the National Association of Legal Secretaries. Classes may be taken in any order.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $60

Suggested First Quarter
Either or both classes may be taken

CERTIFICATE

(Minimum 6 Credit Hours Required)

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ LSTT	180	Legal Scrtry I	3	F	none
___ LSTT	181	Legal Scrtry II	3	W	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

LIFEGUARD / SWIM INSTRUCTOR TRAINING

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room CT 234 967-4525

Director
Bill Laney

The Program

Training to get a person job ready for water related sporting activities. A large number of summer jobs are available in the Salt Lake area. Several courses are available to help prepare students for employment.

The standard First Aid class runs for 8 hours, and fulfills the Red Cross requirement that this class be completed prior to the end of Lifeguard Training.

Lifeguard training prepares and certifies a person to guard at both public and private facilities. The student must be at least 15 years of age and have intermediate swimming skills. Books should be purchased at the Red Cross (1391 So. Park) and brought to the first class.

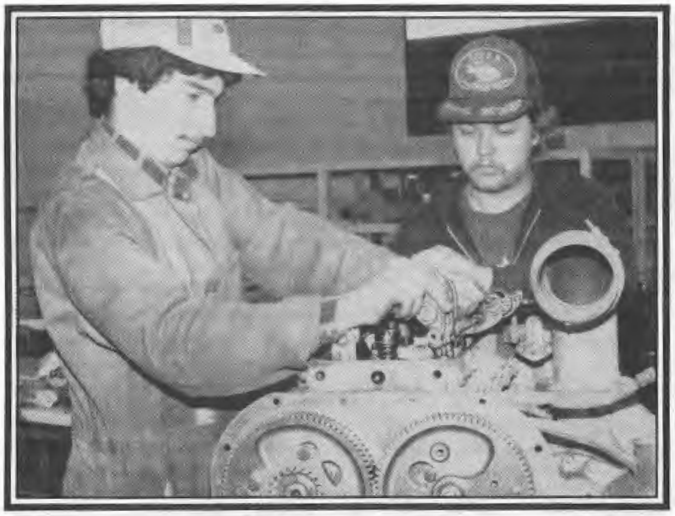
Water Safety Instructor (WSI) prepares and certifies a person to actually teach swimming classes - beginner through advanced. The student should be at least 17 years of age and have swimming skills which will be screened at the first class meeting. Books should be purchased at Red Cross (1391 So. Park) and brought to the first class.

CERTIFICATE

Suggested First Quarter
Courses may be taken in ay order.

Course			Cr	Taught*	Prerequisites
___ CEE	061	Std First Aid	0	TBA	none
___ CEE	062	Lifeguard Trg	0	TBA	15 yrs old, pre-test
___ CEE	063	Water Sfty Instr	0	TBA	17 yrs old, cert.

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



MAINTENANCE MECHANICS

School of Occupational Education
Division of Mechanics
Automotive Trades Building 206 967-4138
(See Division Chair for assigned advisor)

The Program

The Maintenance Mechanics program includes classes offered in the Division of Mechanics with emphasis given to providing students with a versatile mechanical maintenance background. Since many industrial businesses need general maintenance mechanics to keep their mechanical and electrical equipment in operation, students completing this program will be equipped with the skills necessary to be employed in these jobs.

Most mechanics are required to buy their own hand tools. A beginner accumulates more tools as he/she gains experience. A prospective mechanic should be in good physical condition and have above-average mechanical ability and eye-hand coordination.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

If a student is employed in a job involving Maintenance Mechanics, it is possible to earn some laboratory credit through Cooperative Education. With prior approval of a teaching faculty member and the faculty CO-OP coordinator for the Division of Mechanics, the student would register for the regular laboratory course. (A "Section 80" designation identifies that credit is being earned through CO-OP.)

Job Information

Students will receive placement assistance to find jobs related to their skills through the Career Action Center

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost for tools and supplies: $850
Estimated cost for books per quarter: $65

CERTIFICATE

(Minimum 47 Credit Hours Required)

Suggested First Quarter			Credits
COM	110	Organizational & Interpersonal Communications	3
ELC	113	Basic Electricity	5
IND	147	Math for Industry	5
WLD	107	Basic Arc & Acetylene Welding	6

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
Required (19 credits)					
___ COM	110	Org & I Com	3	A	none
___ ELC	113	Bsc Elec	5	F,W,Sp	w/ELC 147 or IND 147
___ IND	147	Math for Ind	5	F,W,Sp	none
___ WLD	107	Bsc Arc/Ace	6	F,W,Sp	none
Electives (28 credits minimum)					
___ AUT	120	Bsc Tne-Up Lab	7	F,W,Sp	w/AUT 121
___ AUT	121	Bsc Tne-Up Thry	5	F,W,Sp	w/AUT 120
___ AUT	130	Engines Lab	7	F,W,Sp	w/AUT 131
___ AUT	131	Engines Thry	5,	F,W,Sp	w/AUT 130
___ BC	103	Res. Blueprint	5	F,W	none
___ CD	113	Drftng Fdmts	5	A	none
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ ELC	133	Mag Cntrls	5	Sp,Su	none
___ HDM	114	Chassis Lab	7	W,Sp	w/HDM 115
___ HDM	115	Chassis Thry	5	W,Sp	w/HDM 114
___ HDM	122	Bsc Dsl Eng Lab	7	F,Sp	w/HDM 123
___ HDM	123	Bsc Dsl Eng Thry	5	F,Sp	w/HDM 122
___ HDM	230	HD Hydlcs Lab	7	Sp	HDM 114,115, HDM 122,123 w/HDM 231
___ HDM	231	HD Hydlcs Thry	5	Sp	w/HDM 230
___ IND	108	Ind. Electronics	2	F,W,Sp	none
___ MACH	120	Bsc Machine Shp	3	F,W,Sp	none
___ MGT	110	Sm Bus Mgt	3	F,W,Sp	none
___ MM	200	Maint (CO-OP)	3-12		consent
___ PTM	110	Prcpls of Tech	4	TBA	none
___ REF	113	Bsc Mtr/C & M	5	F	none
___ SEVT	110	2/4 Cyc Lab	7	F	w/SEVT 111
___ SEVT	111	2/4 Cyc Thry	5	F	w/SEVT 110
___ WLD	108	Weld Lt Gg Mtls	3	F	none
___ WLD	141	Bprint Reading	5	Sp,Su	nonr
___ WLD	192	Spec Weld	7	F,W,Sp	none
___ Other Maintenance classes as approved by advisor					

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

DIPLOMA

(Minimum 97 Credit Hours Required)

Suggested First Quarter **			Credits
COM	110	Organizational & Interpersonal Communications	3
ELC	113	Basic Electricity	5
IND	147	Math for Industry	5
WLD	107	Basic Arc & Acetylene Welding	6

**or see advisor

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
Required (43 credits)					
___ BC	103	Resl Bprint	5	F,W	none
		or			
___ WLD	141	Bprnt Rdg	5	Sp,Su	none

___	CD	113	Drftg Fdmts	5	A	none
___	CL	101	Bsc Cmptr Cpts	3	A	none
___	COM	110	Org Intpl Com	3	A	none
___	ELC	113	Bsc Elec	5	F,W,Sp	w/ELC 147 or IND 147
___	ELC	133	Mag Cntrls	5	F,Sp,Su	none
___	IND	108	Ind. Electronics	2	F,W,Sp	none
___	IND	147	Math for Ind	5	F,W,Sp	permission
___	PTM	110	Prcpls of Tech	4	TBA	none
___	WLD	107	Bsc Arc/Ace	6	F,W,Sp	none

Electives (54 credits minimum)

___	AUT	120	Bsc Tne-Up Lab	7	F,W,Sp	w/AUT 121
___	AUT	121	Bsc Tne-Up Thry	5	F,W,Sp	w/AUT 120
___	AUT	130	Engines Lab	7	F,W,Sp	w/AUT 131
___	AUT	131	Engines Thry	5	F,W,Sp	AUT 130
___	BC	103	Res. Blueprint	5	F,W	none
___	HDM	114	Chassis Lab	7	W,Sp	w/HDM 115
___	HDM	115	Chassis Thry	5	W,Sp	w/HDM 114
___	HDM	122	Bsc Dsl Eng Lab	7	F,Sp	w/HDM 123
___	HDM	123	Bsc Dsl Eng Thry	5	F,Sp	w/HDM 122
___	HDM	230	HD Hydlcs Lab	7	Sp	HDM 114,115, HDM 122,123 w/HDM 230
___	HDM	231	HD Hydlcs Thry	5	Sp	w/HDM 230
___	MACH	120	Rel Machine Shp	3	F,W,Sp	none
___	MGT	110	Sm Bus Mgt	3	F,W,Sp	none
___	MM	200	M/M (CO-OP)	3-12		consent
___	REF	113	Bsc Mtr/C & M	5	F	none
___	SEVT	110	2/4 Cyc Lab	7	F	w/SEVT 111
___	SEVT	111	2/4 Cyc Thry	5	F	w/SEVT 110
___	WLD	108	Weld Lt Gg Mtls	3	F	none
___	WLD	192	Spec Weld	7	F,W,Sp	none

___ Other Maintenance classes as approved by advisor

*A=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 124 Credit Hours Required)

Suggested First Quarter **			Credits
COM	110	Organizational & Interpersonal Communications	3
ELC	113	Basic Electricity	5
IND	147	Math for Industry	5
WLD	107	Basic Arc & Acetylene Welding	6

**or see advisor

Course	Cr	Taught*	Prerequisites

General Requirements (38 credits)

Core Academic Skills

___	CL	101	Bsc Cmptr Cpts	3	A	none
___	COM	110	Org Intpl Com	3	A	none
___	ENG	101	English Comp	4	A	pre-test
___	IND	147	Math for Ind	5	F,W,Sp	none

___ Reading level (determined by dept)

General Education

___ Interdisciplinary Course 5 A variable

___ Choose an additional 18 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (86 credits)

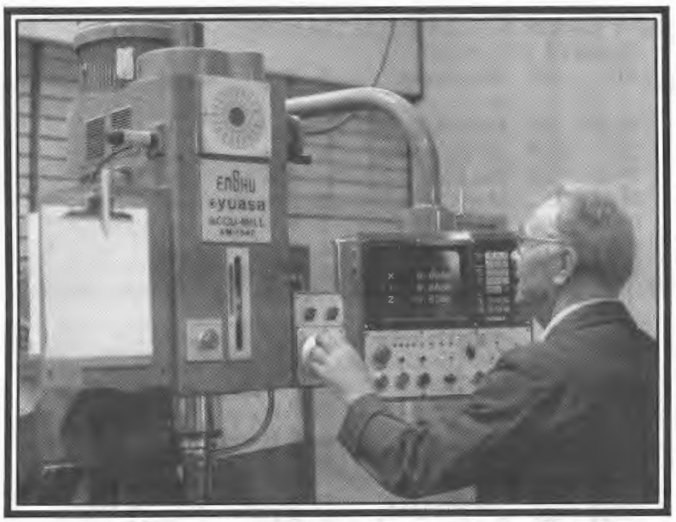
Required (32 credits)

___	BC	103	Resl Bprint	5	F,W	none
			or			
___	WLD	141	Bprnt Rdg	5	Sp,Su	none
___	CD	113	Drftng Fdmts	5	A	none
___	ELC	113	Bsc Elec	5	F,W,Sp	w/IND 147
___	ELC	133	Mag Cntrls	5	F,Sp,Su	none
___	IND	108	Ind. Electronics	2	F,W,Sp	none
___	PTM	110	Prcpls of Tech	4	TBA	none
___	WLD	107	Bsc Arc/Ace	6	F,W,Sp	none

Electives (54 credits minimum)

___	AUT	120	Bsc Tne-Up Lab	7	F,W,Sp	w/AUT 121
___	AUT	121	Bsc Tne-Up Thry	5	F,W,Sp	w/AUT 120
___	AUT	130	Engines Lab	7	F,W,Sp	w/AUT 131
___	AUT	131	Engines Thry	5	F,W,Sp	w/AUT 130
___	BC	103	Res. Blueprint	5	F,W	none
___	HDM	114	Chassis Lab	7	W,Sp	w/HDM 115
___	HDM	115	Chassis Thry	5	W,Sp	w/HDM 114
___	HDM	122	Bsc Dsl Eng Lab	7	F,Sp	w/HDM 123
___	HDM	123	Bsc Dsl Eng Thry	5	F,Sp	w/HDM 122
___	HDM	230	HD Hydlcs Lab	7	Sp	HDM 114,115, HDM 122,123 w/HDM 231
___	HDM	231	HD Hydlcs Thry	5	Sp	w/HDM 230
___	MACH	120	Rel Machine Shp	3	F,W,Sp	none
___	MGT	110	Sm Bus Mgt	3	F,W,Sp	none
___	MM	200	M/M (CO-OP)	3-12		consent
___	REF	113	Bsc Mtr/C & M	5	F	none
___	SEVT	110	2/4 Cyc Lab	7	F	w/SEVT 111
___	SEVT	111	2/4 Cyc Thry	5	F	w/SEVT 110
___	WLD	108	Weld Lt Gg Mtls	3	F	none
___	WLD	192	Spec Weld	7	F,W,Sp	none

*A=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



MANUFACTURING TECHNOLOGY

School of Business and Technology
Division of Technology
Metal Trades Building Room 228 967-4098

Faculty

Professor: Robert C. Ashdown; *Assistant Professor:* Dennis Murphy; *Instructors*: Morteza Sudat-Hosieny, Michael Sager.

The Program

The curriculum is designed to equip students with the skills and knowledge necessary to plan and select proper materials, processes and methods of manufacturing, design tooling and equipment, select and treat materials, and use computers in the design and manufacturing process. Specifically, students learn machining, manufacturing processes, computer languages and programming, CAD/CAM/CNC, work analysis, engineering materials, estimating and planning, and related general education classes.

Preparation Note

ASSET testing will be done upon entry into the college except for students with prior college-level experience. A.S. students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.
Those interested in this program should have a strong high school background in math, science, and English.
Students interested in the program must comply with the selection process. Acceptance into the program is based upon overall GPA and results of the ASSET Test.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Option

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. Credit earned from MT 200 is applied toward graduation requirements as Elective credit.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $100 - $150 per quarter

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 107 Credit Hours Required)
(The following course outline for an AAS degree in Manufacturing Technology has been submitted to the Board of Regents for approval.)

Suggested First Quarter			Credits
AST	105	Fundamentals of Electricity	7
MFG	150	Basic Machine Operation	5
MTH	105	College Algebra	5

Course			Cr	Taught*	Prerequisites
General Requirements (31 credits)					
Core Academic Skills					
___ COM	150	Intro Mass Com	5	A	none
___ ENG	101	Eng Comp	4	A	pre-test
___ MTH	105	Algebra	5	A	MTH 101
___ Reading (determined by dept)				A	variable
General Education					
___ Interdisciplinary Course			5	A	variable
___ Choose an additional 12 credit hours from at least three of the following general education areas: Biological Science, Physical Science, Humanities, Social Science					
(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)					
Major Course Requirements					
___ AST	105	Fdmt of Elec	7	F,W,Sp	AST 101
___ CD	208	Cmptr Draft	3	Su	AST 106 or ELET 101, or 153 or ENGR 101 or MFG 150
___ CD	254	Geo D& T	3	F	CD 133
___ CHEM	121	Prcpl of Chem I	5	F,W,Sp	MTH 105 or equiv
___ CS	170	FORTRAN	4	A	MTH 106,CIS 101 or ENGR 101 & w/MTH 111
___ ENG	130	Tech Writing	4	A	ENG 101
___ MFG	150	Bsc Mach Opn	5	F	none
___ MFG	160	Into Mach Opn	5	W	MFG 150
___ MFG	170	Mfg Proc	3	Sp	MFG 150
___ MFG	201	NC/CNC	3	F	MFG 160
___ MFG	215	Engr Mtls	3	Sp	CHEM 121, MFG 170
___ MFG	230	Qlty Cntrl Prss	3	Sp	MFG 170
___ MTH	106	Trig	5	A	MTH 105
___ MTH	111	Calc I	5	A	MTH 106
___ PHY	117	Mechanics	5	A	ELET 106/MTH 106
___ PHY	118	Ht, Lgt & Snd	5	W,Sp,Su	PHY 117
___ WLD	105	Rel Welding	3	F,W,Sp	none
___ **AST Elective** (take 5 credits)					

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF SCIENCE DEGREE

(Minimum 127 Credit Hours Required)

The AS Degree Program with emphasis in Manufacturing Technology satisfies the general requirements for the first two years of a Baccalaureate of Science Degree in Manufacturing Engineering Technology.

Suggested First Quarter			Credits
CD	110	Engineering Drafting	3
ENG	101	English Composition	4
MFG	150	Basic Machine Operation	5
MTH	105	Algebra	5
PE		Physical Education	1

Course			Cr	Taught*	Prerequisites
General Requirements (52 credits)					
Core Academic Skills					
___ CIS	102	Intro to CIS	4	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (minimum of 75 credits)

___ CD	110	Engr Draft	3	Sp,Su	none
___ CD	130	CAD Graphics	3	A	CD 102 or equiv
___ CD	254	Geo D& T	3	F	CD 133
___ CHEM	121	Prcpl of Chem I	5	F,W,Sp	MTH 105 or equiv
___ CS	170	FORTRAN	4	A	ENGR 101 or MTH 106, or CIS 101 w/MTH 111
___ ENG	130	Tech Writing	4	A	ENG 101
___ LS	121	Prsnl Hlth	3	A	none
___ MFG	150	Rel Mach Opn	5	F	none
___ MFG	160	Into Mach Opn	5	W	MFG 150
___ MFG	170	Mfg Proc	3	Sp	MFG 150
___ MFG	201	NC/CNC	3	F	MFG 160
___ MFG	215	Engr Mtls	3	Sp	CHEM 121 & MFG 170
___ MFG	230	Qlty Cntrl Prss	3	Sp	MFG 170
___ MTH	111	Calc I	5	A	MTH 106 or equiv
___ MTH	112	Calc II	5	A	MTH 111
___ MTH	106	Trig	5	A	MTH 105
___ PHY	117	Mechs	5	A	MTH 106 or ELET 106
___ PHY	118	Ht, Lgt & Snd	5	W,Sp,Su	PHY 117
___ WLD	105	Related Weld	3	F,W,Sp	none

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

COMPUTERIZED MACHINING TECHNOLOGY

(Minimum 69 Credit Hours Required)

Students entering the machinist field learn to use various types of machines such as the drill press, engine lathe, milling machine, and precision grinders used in the manufacturing industry. They also learn the operation of machine tools, accuracy, quality finishing, and speed of performance.

Training includes quality control, heat treating, the study of metals, numerical control operations. Entry level skills for the machinist include blueprint reading, shop mathematics and welding.

Job opportunities are excellent and are expected to increase in the future.

Suggested First Quarter			Credits
CIS	102	Intro to CIS	4
COM	110	Organizational & Interpersonal Com	3
LE	127	Study Skills	2
MACH	101	Blueprint Reading	5
WLD	105	Related Welding	3

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ CIS	102	Intro to CIS	4	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	Eng Comp	4	A	pre-test
___ LE	127	Study Skills	2	A	none
___ MACH	101	B'print Rdng	4	F,W	none
___ MACH	111	Intro to Metal	3	F,W,Sp	none
___ MACH	114	Bsc Mach Lab	4	F,W	none
___ MACH	115	Bsc Mach Thry	4	F,W	none
___ MACH	124	NC/CNC Aps	4	W	MACH 114,115
___ MACH	125	NC/CNC Mach	4	W	MACH 114,115
___ MACH	134	NC/CNC Opns	4	Sp	MACH 124,125
___ MACH	135	NC/CNC Tech	4	Sp	MACH 124,125
___ MACH	137	CAD/CAM	3	F,Sp	MACH 124 & MACH 125
___ MACH	147	Mach Math I	5	F	none
___ MACH	148	Mach Math II	5	W	MACH 147
___ MACH	149	Mach Math III	5	W	MACH 148
___ PT	110	Prcpl Of Tech I	4-5	A	MTH 099 or equiv
___ WLD	105	Rel Welding	3	F,W,Sp	none

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

PRODUCTION MACHINIST

General Information

Students are required to move, maintain, repair, program, set-up, and operate metal working equipment. They are required to perform additional duties such as reading blueprints, job orders and perform set-up operations. Machinists need a good background in mathematics, science and drawing as well as a good mechanical aptitude.

Special Requirements

Basic math, manual dexterity, good eyesight and good problem-solving skills.

Job Information

The outlook for the next ten years is good for both job openings and wages for men and women. Entry-level salaries start around $4.50 per hour and up.

Suggested First Quarter

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. *The hours completed do not apply toward other college programs.*

Courses	Hours	Courses	Hours
Safety	8	All Measurements	50
Metals	20	Hand Tools	30
Welding	40	Basic CNC	25
Lathes	250	Math	50
Mills	100	Reg & Surface Grinding	10
Drill Presses	40	Job Club	60
Sawing	20		
Total Hours			**703**

MARKETING MANAGEMENT

School of Business and Technology
Division of Business Systems
Business Building Room 105 967-4325

Faculty

Professors: Lewis Stephens, Curtis Youngman; *Associate Professor:* Kathy M. Walton; *Assistant Professor:* Lynn Suksdorf

The Program

Marketing is a major function of American Business, with a widely diverse field of job opportunities including Retailing, Direct Sales, Advertising, Physical Distribution and Purchasing. Information management and public relations are important aspects of the field. Marketing continues to increase in importance in the world of commerce and industry and many managers are chosen from successful marketing personnel. ***If students desire to transfer to a four-year college they should pursue the Associate of Science Degree.***

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete a degree. The classes designed to assist students in reaching the skill level necessary to enter the certificate and degree programs are: BUS 080 (Business Math), BUS 101 (Business English), CIS 102 (Computer Information Systems), OIS 108 (WordPerfect for Non-OIS Majors). Any class in the preparatory skills may be waived if the student can demonstrate equivalent skill.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of Advisor and/or Division Chair.

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. Credit earned from MKTG 200 is applied toward graduation requirements as Business Elective credit

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply costs: $125-$150 per quarter.

CERTIFICATE

(Minimum 54 Credit Hours Required)

Suggested First Quarter			Credits
BUS	115	Business Communication	3
CST	101	Customer Service	3
MGT	101	Introduction to Business	4
MKTG	103	Introduction to Marketing	5
		Elective	1

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ ACCT	101	Elem Acct I	4	A	FIN 138 or w/FIN 138
___ BUS	115	Bus Com	3	A	BUS 101, ENG 101
___ CIS	140	Bus Cmptr Apl	3	A	ACCT 101, CIS 102
___ ENG	101	Eng Comp	4	A	pre-test
___ FIN	138	Fin Math	5	A	pre-test
___ MGT	101	Intro to Bus	4	A	none
___ MGT	205	Lgl Envr Bus	5	A	none
___ MKTG	103	Intro to Mktg	5	A	none
___ MKTG	107	Promotion	5	F,W	MKTG 103
___ MKTG	109	Retail Mgt	5	F	none
		or			
___ MKTG	236	Industrial Mktg	5	F	none
___ MKTG	148	Sales	5	F,W,Su	MKTG 103
___ TRM	101	Distribution Sys	3	A	none
___ **Marketing Electives** (take 3 credits)					

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 104 Credit Hours Required)

Suggested First Quarter			Credits
BUS	115	Business Communication	3
CST	101	Customer Service	3
MGT	101	Introduction to Business	4
MKTG	103	Introduction to Marketing	5
		Elective	1

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ FIN	138	Fin Math	5	A	pre-test
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (71 credits)

___ ACCT	101	Elem Acct I	4	A	FIN 138 or w/FIN 138
___ ACCT	102	Elem Acct. II	4	A	ACCT 101, FIN 138
___ BUS	115	Bus Com	3	A	BUS 101, ENG 101
___ BUS	230	Report Writing	3	F,W,Sp	BUS 115
___ CIS	140	Bus Cmptr Apl	3	A	ACCT 101, CIS 102
___ CST	101	Customer Serv	3	W,Sp	none
___ ECN	201	Macro Ecn	4	A	MGT 101
___ MGT	101	Intro to Bus	4	A	none
___ MGT	205	Lgl Envr Bus	5	A	none
___ MGT	240	Intl Trade/Bus	4	F,Sp	ECN 201, MGT 101
___ MKTG	103	Intro to Mrktg	5	A	none
___ MKTG	107	Promotion	5	F,W	MKTG 103
___ MKTG	109	Retail Mgt	5	F	none
		or			
___ MKTG	236	Industrial Mktg	5	F	none
___ MKTG	148	Sales	5	F,W,Su	MKTG 103
___ MKTG	210	Mrktg Info Mgt	3	W,Sp	MKTG 103
___ MKTG	212	Prdct/Prcg Strg	3	Sp	MKTG 103
___ MKTG	250	Prcpls Market	5	Sp	MKTG 107, 210, 212, 236
___ TRM	101	Intro Dist Sys	3	A	none
___ **Electives** (take 4 credits)					
BUS	190	DEX	1-3	TBA	none
BUS	192	Toastmasters	1	TBA	none
CIS	130	Business Prsnt	3	A	none
MGT	160	Prcpl of Supv	5	A	none
MKTG	109	Retail Mgt	5	F	none
MKTG	123	Telemarketing	3	Sp	none
MKTG	191	Job Expo	3	W	none
MKTG	200	Mktg CO-OP	3-6	TBA	Soph & permission
MKTG	236	Industrial Mktg	5	F	none
MKTG	299	Crt Tpcs Mrktg	1-5	TBA	variable

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF SCIENCE DEGREE

(Minimum 96 Credit Hours Required)

Students desiring to transfer to four-year colleges should pursue this degree.

Suggested First Quarter			Credits
BUS	115	Business Communication	3
CST	101	Customer Service	3
MGT	101	Introduction to Business	4
MKTG	103	Introduction to Marketing	5
		Elective	1

Course			Cr	Taught*	Prerequisites
General Requirements (52 credits)					
Core Academic Skills					
___ CIS	102	CIS Intro	4	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Nti Gov	5	A	none

General Education

___	Biological Science	5	A	variable
___	Humanities	5	A	variable
___	Interdisciplinary Course	5	A	variable
___	Physical Science	5	A	variable
___	Social Science	5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

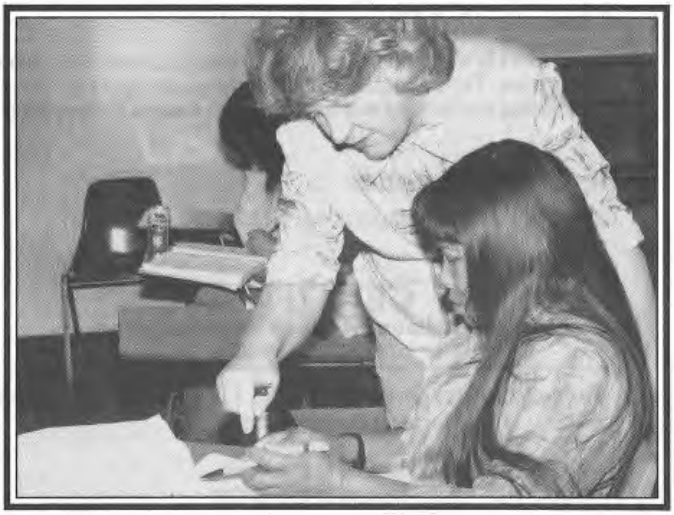
Major Course Requirements (45 credits)

___	ACCT	101	Elem Acct I	4	A	FIN 138 or w/FIN 138
___	ACCT	102	Elem Acct II	4	A	ACCT 101, FIN 138
___	ACCT	203	Mgrl Acct	4	A	ACCT 102
___	BUS	115	Bus Com	3	A	BUS 101, ENG 101
___	BUS	215	Calc for Bus**	4	A	MTH 105
___	ECN	201	Macro Ecn	4	A	MGT 101
___	ECN	202	Micro Ecn	4	A	MGT 101
___	FIN	138	Fin Math	5	A	pre-test
___	MGT	205	Lgl Envr Bus	5	A	none
___	MGT	220	Bus Statistics I	4	A	MGT 101, MTH 101
___	MGT	230	Bus Statistics II	4	A	MGT 220, MTH 105

**A*= All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

** BUS 215 is not required for Business Education and Marketing Education majors at some four-year universities and colleges.

☞ COM 120, PSY 101 and SOC 101 are recommended if transferring to the University of Utah. (One course in philosophy must be taken after transferring there.)



MATHEMATICS

School of Humanities & Sciences
Division of Sciences
Technology Building Room 416 967-4150

Faculty

Professors: Reed Parr, James Wood; *Associate Professors*: Ann-Mari Josefson, Verlaine McPhie; *Assistant Professors:* Charles Cummins, Cyril Watt; *Instructor:* Paul Smith

The Program

In the area of mathematics, classes range from intermediate algebra through partial differential equations. Credit in these classes support all degrees awarded by the college and many are transferable to other institutions. The department endeavors to minimize the anxiety felt by many students, but is also committed to a rigorous treatment of the subject to develop mathematical skills that are of value.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. Credit earned from MTH 200 is applied toward graduation requirements as a Mathematics Elective credit.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $25 - $40 per class.

(continued on following page)

DEPARTMENTAL OFFERINGS

(Courses administered by the Mathematics Department)

Course			Cr	Taught*	Prerequisites
MTH	101	Interm Algebra	5	A	pre-test
MTH	103	Geometry	4	F,Su	MTH 101
MTH	105	College Algebra	5	A	MTH 101
MTH	106	Plane Trig	5	A	MTH 105
MTH	109	Pre-Calculus	5	A	MTH 106
MTH	111	Calculus I	5	A	MTH 106
MTH	112	Calculus II	5	A	MTH 111
MTH	113	Calculus III	5	A	MTH 112
MTH	125	Spl Studies	1-2	F,W,Sp	permission
MTH	141	Statistics	4	A	MTH 101
MTH	200	Math CO-OP	3-6	A	permission
MTH	240	Finite Math	4	F	MTH 101
MTH	291	Ord Dif Equat	3	F,W	MTH 113
MTH	292	Mtrcs/Vector	3	W,SP	MTH 291
MTH	293	Ptl Dif Equat	3	Sp,Su	MTH 292

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

MEDICAL SUPPORT OCCUPATIONS

School of Occupational Education
Division of Construction and Service Industries
Construction Trades Building Room 262 967-4074

MEDICAL ASSISTANT

Faculty

Instructors: Diana Carroll, Louise Thomas, Jana Tucker

The Program

Medical Assistants are trained primarily to work in a physician's office assisting with the care and treatment of patients in clinical and administrative procedures. Generally in the "back office" areas with patients.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $100
Estimated uniform cost: $150

CERTIFICATE

(Minimum 73 Credit Hours Required)

Suggested First Quarter			Hours
BUS	101	Bus English	3
LS	128	Alcohol & Drugs	3
MA	160	Medical Terminology	5
MA	161	Medical Science I	5
MA	171	Lab	2

Course			Cr	Taught*	Prerequisites
Major Course Requirments					
BUS	101	Bus English	3	A	none
COM	110	Org Intpl Com	3	A	none
LS	128	Alchl/drugs	3	A	none
MA	160	Medl Termnlgy	5	A	none
MA	161	Medl Science I	5	A	w/MA 160, 171
MA	162	Medl Science II	5	A	MA 161, w/172
MA	163	Clncl Prcds	5	A	MA 160, MA 161
MA	164	Lab Prcds	5	A	MA 161, w/MA 174
MA	165	Medl Ofc Mgt I	5	A	MA 160, w/MA 175
MA	166	Bsc Radiology	3	A	MA 161, w/MA 176
MA	167	Medl Ofc Mgt II	3	A	MA 165, w/MA 177
MA	171	Medl Sci Lab I	2	A	w/MA 161
MA	172	Medl Sci Lab II	2	A	w/MA 162
MA	173	Clncl Prcds Lab	2	A	w/MA 163
MA	174	Lab Prcds Lab	3	A	w/MA 164
MA	175	Medl Ofc L I	2	A	w/MA 165
MA	176	Bsc Rdlgy Lab	1	A	w/MA 166
MA	177	Medl Ofc Lab II	2	A	w/MA 167
MA	201	Medl Asst Ext	6	A	permission
OIS	112	WordPerfect	5	A	OIS 107 or equiv w/OIS 115
PSY	140	Persl Grth & Dev	3	F,W,Sp	none

MEDICAL RECORDS SPECIALIST

(Riverside Campus)

Faculty

Instructor: Delores Rowley

Suggested First Quarter

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objective. *The hours completed do not apply toward other college programs.*

General Information

Upon compeltion of this training, the student will be able to process and complete medical records for hospitals, 24-hour clinics and doctor's offices and will complete an externship in the medical records department of various medical facilities. This program will be offered during the day and again in the evening.

Special Requirements

15 WPM typing speed, ability to work well with large numbers of people in a high-paced work setting. Ability to follow oral and written instructions. Ability to work on an individualized basis where learning then becomes an active, self-regulating process. Interest and aptitude in medical field and a desire to maintain personal appearance appropriate to occupation. Commitment on the part of the student to an ongoing development of his/her professional growth.

Courses	Hours
Data Entry	30
Human Relations	40
English	135
Typing Skills	160
Medical Office Procedures	75
Production Typing	30
Medical Terminology	40
Basic Bookkeeping	50
Basic Wordprocessing (WordPerfect 5.0)	30
Supervised 6 week externship at medical facility	125
Job Club	60
Total Hours	**775**

MEDICAL SECRETARY

Faculty

Instructors: Diana Carroll, Louise Thomas, Jana Tucker

The Program

The Medical Secretary program is designed to prepare a person for a career as a medical secretary, receptionist, or transcriptionist. The training is practical and to the point, and is 2-1/2 quarters in length. It includes an on-the-job internship with Cooperative Education. The training concentrates on both medical office skills and the people skills necessary to succeed on the job.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $85

CERTIFICATE

Minimum 49 Credit Hours Required

Suggested First Quarter			Hours
BUS	101	Business English	3
COM	110	Organizational & Interpersonal Communications	3
MA	160	Medical Terminology	5
OIS	101	Secretarial Bookkeeping	3

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
BUS	101	Bus English	3	A	none
COM	110	Org Intpl Com	3	A	none
LS	128	Alcohol/Drugs	3	A	none
MA	160	Med Term	5	A	none
MA	165	Med Ofc Mgt I	5	A	MA 160, w/MA 175
MA	167	Med Ofc Mgt II	3	A	MA 165, w/MA177
MA	168	PT Care/Com	2	A	MA 160, MA 165
MA	175	Lab	2	A	w/MA 165
MA	177	Lab	2	A	w/MA 167
MA	202	Med Sec Extern	3	A	comp of req courses
OIS	101	Sec Bkpg	3	A	none
OIS	112	WrdPrfct OIS	5	A	OIS 107, w/OIS 115
OIS	115	Kybdg Skl Bldg	2	A	OIS 107 or equiv
OIS	130	Bck-to-wrk Mch	2	A	none
OIS	155	Rec Mgt	3	A	none
PSY	140	Prsnl Grth Dev	3	F,W,Sp	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

NURSE'S AIDE

Faculty

Instructor: Albert Ybarra

Suggested First Quarter
This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives.
The hours completed do not apply toward other college programs.

General Information

A student interested in this program must have a genuine concern for people and be able to assist those who are ill. On-site hospital program. Those who work in this area may work weekends and shift work.

Special Requirements

Like to work in a responsible "caregiver" position. General reading and math skills.

Job Information

Students who complete training will work under the direction of nursing and medical staff in responding to patients' needs. Students will learn to keep records, take temperatures, pulse and respiration rates, and record food and liquid intake and output as directed. Nurse Assistant may apply compresses and hot water bottles, change bed linens, answer phones, run errands, dust and clean rooms, take patients to therapy areas, bathe, dress and undress patients, and serve and collect food trays.

Courses	Hours
Medical Terminology	50
Vocational Standards	5
Interpersonal Relationships	30
Hospital and Health Team	10
Medical and Surgical Asepsis	50
Introduction Anatomy and Physiology	120
Vital Signs and Physical Assessment	15
General Patient Care	60
Special Care Nursing	60
Application of Clinical Situation	140
Job Club	60
Total Hours	**600**

NONDESTRUCTIVE TESTING TECHNOLOGY

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 254 967-4201

Director

George Van De Water

The Program

☞ This is a proposed Diploma program and is in the process of development and review.

This program is scheduled to start in the Summer of 1990. Courses and completion requirements are currently being developed. For information about course content and scheduling, contact the Division of Continuing Education.

The Nondestructive Testing Program offers the student the opportunity for a career in a progressive new field with many diverse job opportunities and excellent entry-level salaries.

Nondestructive Testing involves examining products and materials for flaws or defects without damaging the actual product. During the first two quarters in Nondestructive Testing, the training will focus on basic manufacturing and materials-joining processes, including Radiography, Ultrasonic, and Visual inspection techniques. The fifth and sixth quarters will include Eddy Current, Magnetic Particle, and Liquid Penetrant. The seventh and eighth quarters will include advanced study of these testing methods as well as computer application in NDT.

Students learn to perform the basic testing techniques on both metals and nonmetals, such as synthetics and composites, as well as how to evaluate results and write final reports. Learning will be enhanced through field trips to area businesses and presentations by guest speakers.

Placement services are provided by the College.

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter Courses should plan on extra time to complete the program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost for eight quarters of training is $650.00

NURSING

School of Humanities and Sciences
Division of Health and Human Services
Administration Building Room 139 967-4517

Faculty

Professor: Carol Barnes; *Associate Professor*: Helen Sheppard; *Assistant Professors*: Rebecca Aguayo, Susan Feeny, Debra Mills, Laura Nicholson, Marlene Richards; *Instructors*: Nikki Conner, Donna Mason, Claudia Rock

PRACTICAL NURSING

The Program

The Practical Nursing program at Salt Lake Community College is accredited by the National League for Nursing. Licensed Practical Nurses give nursing care under the supervision of a registered professional nurse or physician.

Successful completion of the LPN program prepares the graduate to sit for the NCLEX licensure examination to become a Licensed Practical Nurse. The graduate is also eligible to apply for advanced placement in an Associate Degree Registered Nursing Program.

A joint program is also taught at Davis Area Vocational Center at Kaysville, Utah. Information on the program at that site is available by calling 1-546-2441.

Minimum Application Requirements

1. High School Diploma or equivalent.
2. Application to SLCC.
3. ASSET test scores of Numerical 26, Algebra 28, Reading Comprehension 22, Language Usage 45.
4. High school or college GPA 2.5 or higher
5. Separate application to the Health Sciences department. (Application forms are available in the Assessment Center after testing is complete.).
6. Two reference letters from employers, supervisors, teachers.

☞ Enrollment is limited to a small number of students each quarter determined by available instructional areas in local health care facilities. Students are accepted into the PN program according to a point system based on the application requirements above.

All applicants with enough points to qualify are accepted into the PN program, and are placed on a waiting list according to the date their

application file is complete. Applicants are notified by mail of their projected starting date or of non-acceptance. Materials necessary to complete an application file are listed on the application form, along with deadlines and the address for submission.

To maintain a position in the program, students must be continually enrolled and complete all nursing classes in sequence. All nursing and support classes must be completed with a "C" grade or better.

Students who need preparatory classes to meet the minimum application requirements should plan on extra time before acceptance into the program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken. *Nursing classes may be taken only after acceptance into the program.*

The Biology department waives the Biology 101 prerequisite when a student passes the SLCC Biology Proficiency exam. Chemistry 140 is strongly recommended to satisfy the Chemistry prerequisite for Physiology (BIOL 210).

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment

Books and Supplies

Approximate total cost of books and supplies: $750
Graduation licensure NCLEX fees: $120

CERTIFICATE

(Minimum 64 Credit Hours Required)

Suggested First Quarter **Credits**
See program advisor for scheduled Nursing sequence

Course	Cr	Taught*	Prerequisites

Core Requirements

Reading Comprehension ASSET test score 22
Math ASSET test: Numerical 26, Algebra 28
High School Chemistry or equivalent
SLCC Biology Proficiency Exam or BIOL 101

Major Course Requirements (64 credits)

___	BIOL	205	Anatomy	5	A	pre-test, w/BIOL 206
___	BIOL	206	Anatomy Lab	0	A	w/BIOL 205
___	BIOL	210	Physiology	5	A	pre-test
___	BIOL	214	Microbiology	5	A	pre-test, w/BIOL 215
___	BIOL	215	Microbio Lab	0	A	w/BIOL 214
___	LS	110	Prcpl Nutrition	3	A	none
___	NSG	110	Intro Nursing	2	A	acceptance in prog
___	NSG	121	Nursing Fund	9	A	BIOL 205-6, LS 110 NSG 110 or NSG 120, PSY 101
	NSG	123	Pharmacol I	1	A	NSG 110 or NSG 120
___	NSG	124	Pharmacol II	1	A	NSG 110 or NSG 120
___	NSG	125	Pharmacol III	1	A	NSG 110 or NSG 120
___	NSG	131	Med/Surg Nsg	10	A	NSG 121, NSG 123
___	NSG	141	Newborn Nsg	6	A	BIOL 214-215, NSG 131; w/NSG 142, PSY150
___	NSG	142	Nsg of Children	6	A	BIOL 214-215, NSG 131; w/NSG 141, PSY 150
___	PSY	101	Gen Psy	5	A	none
___	PSY	150	Hmn Grth Dev	5	A	none

**A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=Variable*

REGISTERED NURSING

The Program

The Salt Lake Community College Registered Nursing program provides both general and technical education for an Associate of Applied Science Degree in Nursing. Associate Degree registered nurses give health care under a physician's supervision.

Successful completion of the program will qualify the graduate to sit for the NCLEX to become a registered nurse. A second year advanced placement program is available for qualified Licensed Practical Nurses.

Students desiring an Associate of Science degree must take all additional courses required by the college. (See Associate of Science degree requirements on pages 10 & 11 of this catalog.)

Minimum Application Requirements:

1. High School Diploma or equivalent.
2. Application to SLCC.
3. Minimum ASSET test scores:
   Reading Comp 22 Numerical 26
   Algebra 28 Language 45
4. High school or college GPA 3.0 or higher.
5. Separate application to the Health Sciences Department. (Application forms are available in the Assessment Center after testing is complete.)
6. Two reference letters from employers, supervisors or teachers.

Enrollment is limited to a small number of students each quarter determined by available instructional areas in health care facilities Students are accepted in to the RN program according to a point system based on the application requirements above.

All applicants with enough points to qualify are accepted into the RN program, and are placed on a waiting list according to the date their application file is complete. Applicants are notified by mail of their projected starting date or of non-acceptance. Materials necessary to complete an application file are listed on the application form along with deadlines and the address for submission.

☞ Applicants with a college degree need not take the ASSET test; but, must still meet eligibnility requirements for MATH 101.

Students who need preparatory classes to meet the minimum application requirements should plan on extra time before acceptance into the program.

To maintain a position in the program, students must be continually enrolled and complete all nursing classes in sequence. All nursing and support classes must be completed with a "C" grade or better.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken. Nursing classes may be taken only after acceptance into the program.

The Biology Department waives the Biology 101 prerequisite when a student passes the SLCC Biology Proficiency Exam. Chemistry 140 is strongly recommended to satisfy the Chemistry prerequisite for Physiology (BIOL 210).

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: First year - $750
Second year - $550
Graduation Licensure and NCLEX fee - $160

ASSOCIATE OF APPLIED SCIENCE DEGREE

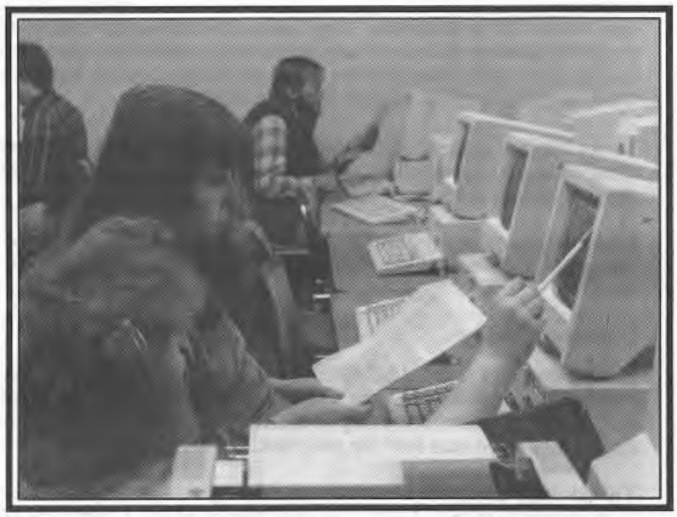
(Minimum 107 Credit Hours Required)

Suggested First Quarter	Credits
See program advisor for scheduled Nursing sequence	

Course	Cr	Taught*	Prerequisites
General Requirements (22 credits)			
Entrance Requirements:			
___ Reading level (ASSET Reading Comp 22)			
Core Academic Skills			
___ Communication	3	A	variable
___ ENG 101 English Comp	4	A	pre-test
___ Math minimum level ASSET scores (Algebra 28, Numerical 26)			
General Education			
___ Interdisciplinary Course (any Interdisciplinary course except COM 150 - see page 11 for list of courses in this field)	5	A	variable
CHEM 140 Elem Chemistry	5	A	MTH 101
___ PSY 101 Gen Psychology	5	A	none
Major Course Requirements (85 credits)			
___ BIOL 205 Anatomy	5	A	pre-test, w/BIOL 206
___ BIOL 206 Anatomy Lab	0	A	w/BIOL 205
___ BIOL 210 Physiology	5	A	pre-test
___ BIOL 214 Microbiology	5	A	pre-test, w/BIOL 215
___ BIOL 215 Microbio Lab	0	A	w/BIOL 214
___ LS 110 Prcpl Nutrition	3	A	none
___ NSG 115 Prof Nurse**	1	A	Adv placement status
___ NSG 120 Intro to Nursing	2	A	perm,w/BIOL205, 206, LS 110, PSY 101
___ NSG 121 Nursing Fund	9	A	BIOL 205-6, LS 110 NSG 110 or NSG 120, PSY 101
___ NSG 123 Pharmacol I	1	A	NSG 110 or NSG 120
___ NSG 124 Pharmacol II	1	A	NSG 110 or NSG 120
___ NSG 125 Pharmacol III	1	A	NSG 110 or NSG 120
___ NSG 131 Med/Surg Nrsg	10	A	NSG 121, NSG 123
___ NSG 141 Mat/Nwbn Nsg	6	A	BIOL 214-215, NSG 131; w/NSG 142, PSY150
___ NSG 142 Nsg of Chldren	6	A	BIOL 214-215, NSG 131;w/NSG 141, PSY 150
___ NSG 221 Adv Nrsg Adt I	10	Sp	NSG 141, 142, PSY 150; w/ CHEM 140
___ NSG 231 Fmly Cntrd Nsg	8	A	NSG 221
___ NSG 241 Adv Nsg Adlt II	8	A	NSG 231
___ PSY 150 Hmn Grth Dev	5	A	none

**A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=Variable*

*** Only Advanced placement students take this course.*



OFFICE INFORMATION SYSTEMS

School of Occupational Education

Division of Construction and Service Industries

Construction Trades Room 262 967-4074

Faculty

Professors: Maureen Aylett, Earl R. Bartholomew, Duane Jacobs, Linda Metos; *Associate Professors:* Nina Edgmand, Marilyn Hibbert, Lorna K. S. Wells; *Assistant Professor:* Rolayne Day

Preparation Note

The classes designed to assist students in reaching the skill level necessary to enter the certificate and degree programs offered in the Office Information Systems department are: BUS 080, (Business Math), OIS 101 (Secretarial Bookkeeping), OIS 107 (Beginning Keyboarding/Word Perfect). Any class in the preparatory skills may be waived if the student can demonstrate equivalent skill.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. Credit earned from ACCT 200 is applied toward graduation requirements as Accounting elective credit.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $125 - $150 per quarter.

BACK-TO-WORK SHORT COURSE PROGRAM

Sandy/Redwood Campus 967-4379 or 571-3717

(14 Credit Hours Required)

The Program

The Office Administration Back-to-Work Program is specifically designed to assist individuals with reasonable keyboarding skills and a desire to return to office employment.

The eight-week comprehensive program concentrates on the key skills necessary in the electronic office. Specifically, the program focuses on word processing (WordPerfect), Business calculations, ten-key proficiency, record keeping (accounts payable/accounts receivable) business communications (including transcription), keyboarding (speed building and error control), and computerized spreadsheets (Lotus 1-2-3). A vigorous component of job keeping/job seeking and positive personal understanding is also integrated throughout the program.

Suggested First Quarter
Courses may be taken in any order as long as prerequisite requirements are met.

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ OIS	110	Wp/WrdPrfct	4	A	typing skills
___ OIS	130	BTW Ofc/Mach	2	A	none
___ OIS	132	BTW Acct	2	A	OIS 130
___ OIS	150	BTW Ofc Prcd	6	A	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

GENERAL OFFICE OCCUPATIONS

The Program

General office occupations personnel perform general office work including compiling typing reports, bills, application forms, documents, business forms and other material from office records. The position may include correspondence from machine transcription, filing, posting information to records, coordinating mail distribution, and answering telephones. Computing and recording numerical data is also performed by general office workers. Accurate and fast production typewriting is essential. This program prepares individuals for employment in many areas. Training and aptitude may lead to positions such as office manager, chief clerk or administrative assistant. The Office Management program is the second year of General Office Occupations.

CERTIFICATE

(51 Credit Hours Required)

Suggested First Quarter
Courses may be taken in any order as long as prerequisite requirements are met.

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ BUS	101	Bus English	3	A	none
___ BUS	115	Bus Writing	3	A	BUS 101, ENG 101
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	Eng Comp	4	A	pre-test
___ MGT	101	Intro to Bus	4	A	none
___ OIS	101	Sec Bkpg	3	A	none
___ OIS	112	WrdPrfct OIS	5	A	OIS 107, w/OIS 115
___ OIS	115	Kybdg Skl Bldg	2	A	OIS 107 or equiv
___ OIS	121	Shorthand I	5	A	typing 30 NWPM
___ OIS	131	Bus Machines	2	A	pre-test
___ OIS	140	Infor Proc Cpts	3	A	none (OIS 107 rec)
___ OIS	155	Records Mgt	3	A	none
___ OIS	187	Vocab Building	3	A	none
___ OIS	201	Sec Procedures	5	F,W,Sp	OIS 101, OIS 112, 187
___ OIS	235	Mch Trscrp/Prf	3	A	BUS 101, OIS 112

☞ It is strongly recommended that OIS 200 (Office Administration Cooperation Education) be included in a student's program.

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

INFORMATION PROCESSING SYSTEMS (WORD PROCESSING)

The Program

The program is designed to prepare individuals to enter and progress in positions such as Word Processing Specialist or Manager. Effective written and oral skills are necessary as well as the ability to delegate responsibility.

CERTIFICATE

(53 Credit Hours Required)

Suggested First Quarter
Courses may be taken in any order as long as prerequisite requirements are met.

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ BUS	101	Bus English	3	A	none
___ BUS	115	BusWriting	3	A	BUS 101, ENG 101
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	Eng Comp	4	A	pre-test
___ LE	122	Career Dev	3	A	none
___ MGT	101	Intro to Bus	4	A	none
___ OIS	101	Sec Bkpg	3	A	none
___ OIS	112	WrdPrfct OIS	5	A	OIS 107, w/OIS 115
___ OIS	115	Kybdg Skl Bldg	2	A	OIS 107 or equiv
___ OIS	121	Shorthand I	5	A	typing 30 NWPM
___ OIS	131	Bus Machines	2	A	pre-test
___ OIS	140	Infor Proc Cpts	3	A	none (OIS 107 rec)
___ OIS	201	Sec Procedures	5	F,W,Sp	OIS 101, OIS 112. 187
___ OIS	212	Adv WrdPrfct	5	F,W,Sp	OIS 112
___ OIS	235	Mch Trscrp/Prf	3	A	BUS 101, OIS 112

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 101 Credit Hours Required)

Suggested First Quarter
Courses may be taken in any order as long as prerequisite requirements are met.

Course				Cr	Taught*	Prerequisites
General Requirements (29 credits)						
Core Academic Skills						
___	COM	110	Org Intpl Com	3	A	none
___	ENG	101	English Comp	4	A	pre-test
___	FIN	138	Fin Math	5	A	pre-test
___	Reading level (determined by dept)					
General Education						
___	Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least two of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Course				Cr	Taught*	Prerequisites
Major Course Requirements (69 credits)						
___	BUS	101	Bus English	3	A	none
___	BUS	115	BusWriting	3	A	BUS 101, ENG 101
___	LE	122	Career Dev	3	A	none
___	MGT	101	Intro to Bus	4	A	none
___	OIS	101	Sec Bkpg	3	A	none
___	OIS	112	WrdPrfct OIS	5	A	OIS 107, w/OIS 115
___	OIS	115	Kybdg Skl Bldg	2	A	OIS 107 or equiv
___	OIS	121	Shorthand I	5	A	typing 30 NWPM
___	OIS	131	Bus Machines	2	A	pre-test
___	OIS	140	Infor Proc Cpts	3	A	none (OIS 107 rec)
___	OIS	155	Records Mgt	3	A	none
___	OIS	201	Sec Procedures	5	F,W,Sp	OIS 101, OIS 112, 187
___	OIS	210	Admin Ofc Mgt	5	W,Sp	MGT 101
___	OIS	212	Adv WrdPrfct	5	F,W,Sp	OIS 112
___	OIS	225	Beg Dsktp Pub	5	W,Sp,Su	OIS 112 , 140, 212, permission
___	OIS	231	Micr Word Proc	5	W,Sp	OIS 112, OIS 140
___	OIS	232	Lotus I	3	W,Sp,Su	OIS 101, OIS 140
___	OIS	235	Mch Trscrp/Prf	3	A	BUS 101, OIS 112
___	OIS	240	W P Feas, Mgt	2	Sp	OIS 112, 140, 212, 231
___	**Electives** (take 3-5 credits)					
	OIS	122	Shorthand II	5	A	shorthand skills
	OIS	187	Vocabulary	3	A	none
	OIS	200	CO-OP	TBA	A	permission
	OIS	299	Spec Studies	TBA	A	permission
	PSY	101	Gen Psych	5	A	none

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

MEDICAL SECRETARY

The Program

The Medical Secretary program is designed to prepare a person for a career as a medical secretary, receptionist, or transcriptionist. The training is practical and to the point, and is 2-1/2 quarters in length. It includes an on-the-job internship in a medical facility. The training concentrates on both medical office skills and the people skills necessary to succeed on the job.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Books and Supplies

Estimated book and supply cost: $85

CERTIFICATE

(Minimum 49 Credit Hours Required)

Suggested First Quarter

BUS	101	Business English	3
COM	110	Organizational & Interpersonal Communications	3
MA	160	Medical Terminology	5
OIS	101	Secretarial Bookkeeping	3

Course				Cr	Taught*	Prerequisites
Major Course Requirements						
___	BUS	101	Bus English	3	A	none
___	COM	110	Org Intpl Com	3	A	none
___	LS	128	Alcohol/Drugs	3	A	none
___	MA	160	Med Term	5	A	none
___	MA	165	Med Ofc Mgt I	5	A	MA 160, w/MA 175
___	MA	167	Med Ofc Mgt II	3	A	MA 165, w/MA 177
___	MA	168	PT Care/Com	2	A	MA 160, MA 165
___	MA	175	Lab	2	A	w/MA 165
___	MA	177	Lab	2	A	w/MA 167
___	MA	202	Med Sec Extern	3	TBA	permission
___	OIS	101	Sec Bkpg	3	A	none
___	OIS	112	WrdPrfct OIS	5	A	OIS 107, w/OIS 115
___	OIS	115	Kybdg Skl Bldg	2	A	OIS 107 or equiv
___	OIS	130	Bck-to-wrk Mch	2	A	none
___	OIS	155	Records Mgt	3	A	none
___	PSY	140	Prsnl Grth Dev	3	F,W,Sp	none

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

OFFICE MANAGEMENT

The Program

The Office Management program is designed to prepare individuals for both entry level office occupations and the skills to move rapidly into supervisory or management levels in an office. With a background in office skills, accounting, data processing, word processing, and the additional training in personnel supervision, management, and communications, graduates will qualify for office management positions requiring not only personal office skills for high-level productivity, but also the office management skills in personnel, equipment, facilities and administrative support.

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 109 Credit Hours Required)

Suggested First Quarter

Courses may be taken in any order as long as prerequisite requirements are met.

Course				Cr	Taught*	Prerequisites
General Requirements (29 credits)						
Core Academic Skills						
___	COM	110	Org Intpl Com	3	A	none
___	ENG	101	English Comp	4	A	pre-test
___	FIN	138	Fin Math	5	A	pre-test
___	Reading level (determined by dept)					
General Education						
___	Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least two of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (77 credits)

___	ACCT	101	Elem Acct	4	A	FIN 138 or w/FIN 138
___	BUS	101	Bus English	3	A	none
___	ECN	201	Macro Econ	4	A	MGT 101
___	MGT	101	Intro to Bus	4	A	none
___	MGT	205	Lgl Envr Bus	5	A	none
___	MGT	250	Prcpl of Mgt	5	W,Sp	BUS 115, MGT 160
___	MKTG	103	Prcpl of Mrktg	5	A	none
___	OIS	101	Sec Bkpg	3	A	none
___	OIS	112	WrdPrfct OIS	5	A	OIS 107, w/OIS 115
___	OIS	115	Kybdg Skl Bldg	2	A	OIS 107 or equiv
___	OIS	121	Shorthand I	5	A	typing 30 NWPM
___	OIS	131	Bus Machines	2	A	pre-test
___	OIS	140	Infor Proc Cpts	3	A	none (OIS 107 rec)
___	OIS	155	Records Mgt	3	A	none
___	OIS	187	Vocab Building	3	A	none
___	OIS	201	Sec Procedures	5	F,W,Sp	OIS 101, 112, 187
___	OIS	210	Admin Ofc Mgt	5	W,Sp	MGT 101
___	OIS	225	Beg Dsktp Pub	5	W,Sp,Su	OIS 112, 140, 212
___	OIS	232	Lotus I	3	W,Sp,Su	OIS 101, OIS 140
___	OIS	235	Mch Trscrp/Prf	3	A	BUS 101, OIS 112

___ **Electives** (take 3-5 credits)

OIS	122	Shorthand II	5	A	shorthand skills
OIS	200	COOP	TBA	A	permission
OIS	212	Adv WrdPrfct	5	F,W,Sp	OIS 112
OIS	231	Micr Word Proc	5	W,Sp	OIS 112, 140
OIS	299	Special Studies	TBA	A	permission

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

SECRETARY

The Program

Secretarial/stenographer training is a Certificate program and an Associate of Applied Science Degree. The Certificate program is designed to train individuals for entry level positions in office occupations. The Associate of Applied Science Degree will also give the individual the skills to move rapidly into supervisory or management levels in an office. The course includes training in shorthand and transcription, English and communication skills, word processing, Lotus spreadsheets, Desktop publishing, machine transcription, accounting, marketing and management skills.

CERTIFICATE

(Minimum 51 Credit Hours Required)

Suggested First Quarter
Courses may be taken in any order as long as prerequisite requirements are met.

Course				Cr	Taught*	Prerequisites
Major Course Requirements						
___	BUS	101	Bus English	3	A	none
___	BUS	115	BusWriting	3	A	BUS 101, ENG 101
___	COM	110	Org Intpl Com	3	A	none
___	ENG	101	Eng Comp	4	A	pre-test
___	MGT	101	Intro to Bus	4	A	none
___	OIS	101	Sec Bkpg	3	A	none
___	OIS	112	WrdPrfct OIS	5	A	OIS 107, w/OIS 115
___	OIS	115	Kybdg Skl Bldg	2	A	OIS 107 or equiv
___	OIS	121	Shorthand I	5	A	typing 30 NWPM
___	OIS	131	Bus Machines	2	A	pre-test
___	OIS	140	Infor Proc Cpts	3	A	none (OIS 107 rec)
___	OIS	155	Records Mgt	3	A	none
___	OIS	187	Vocab Building	3	A	none
___	OIS	201	Sec Procedures	5	F,W,Sp	OIS 101, 112, 187
___	OIS	235	Mch Trscrp/Prf	3	A	BUS 101, OIS 112

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 115 Credit Hours)

Suggested First Quarter
Courses may be taken in any order as long as prerequisite requirements are met.

Course				Cr	Taught*	Prerequisites
General Requirements (29 credits)						
Core Academic Skills						
___	COM	110	Org Intpl Com	3	A	none
___	ENG	101	English Comp	4	A	pre-test
___	FIN	138	Fin Math	5	A	pre-test
___	Reading level (determined by dept)					
General Education						
___	Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least two of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (83 credits)

___	ACCT	101	Elem Acct	4	A	w/FIN 1381
___	BUS	101	Bus English	3	A	none
___	BUS	115	BusWriting	3	A	BUS 101, ENG 101
___	ECN	201	Macro Econ	4	A	none
___	LE	122	Career Dev	3	A	none
___	MGT	101	Intro to Bus	4	A	none
___	MGT	205	Lgl Envr Bus	5	A	none
___	MGT	250	Prcpl of Mgt	5	W,Sp	BUS 115, MGT 160
___	MKTG	103	Prcpl of Mrktg	5	A	none
___	OIS	101	Sec Bkpg	3	A	none
___	OIS	112	WrdPrfct OIS	5	A	OIS 107, w/OIS 115
___	OIS	115	Kybdg Skl Bldg	2	A	OIS 107 or equiv
___	OIS	121	Shorthand I	5	A	typing 30 NWPM
___	OIS	131	Bus Machines	2	A	pre-test
___	OIS	140	Infor Proc Cpts	3	A	none (OIS 107 rec)
___	OIS	155	Records Mgt	3	A	none
___	OIS	187	Vocab Building	3	A	none
___	OIS	201	Sec Procedures	5	F,W,Sp	OIS 101, 112, 187
___	OIS	210	Admin Ofc Mgt	5	W,Sp	MGT 101
___	OIS	225	Beg Dsktp Pub	5	W,Sp,Su	OIS 112, 140, 212
___	OIS	232	Lotus I	3	W,Sp,Su	OIS 101, OIS 140
___	OIS	235	Mch Trscrp/Prf	3	A	BUS 101, OIS 112

___ **OIS Electives** (take 3-5 credits)

OIS	122	Shorthand II	5	A	shorthand skills
OIS	200	COOP	TBA	A	permission
OIS	212	Adv WrdPrfct	4	W,Sp,Su	OIS 112 or perm
OIS	231	Micr Word Proc	5	W,Sp	OIS 112, OIS 140
OIS	299	Special Studies	TBA	A	permission

PHYSICAL EDUCATION

School of Humanities and Sciences
Division of Sciences
Technology Building Room 416 967-4150

Faculty

Associate Professor: Jeffrey Menday; *Instructors:* Nancy Farmer, Jean Widdison

The Program

Salt Lake Community College offers a variety of physical education classes to fill degree requirements. Physical Education classes may be repeated once for credit.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

DEPARTMENTAL OFFERINGS

(Courses administered by the Physical Education Department)

Course			Cr	Taught*	Prerequisites
PE	105	Fitness for Life	1	A	none
PE	106	Jog/Walking	1	F,Sp,Su	none
PE	107	Beginning Arbcs	1	A	none
PE	108	Interm Coed Arbcs	1	A	PE 107 or equiv
PE	110	Beg Weight Trg	1	A	none
PE	111	Inter Wt Trg	1	A	PE 110
PE	115	Beg Basketball	1	A	none
PE	116	Interm Basketball	1	A	PE 115 or equiv
PE	117	Comp Basketball	1	F,W	varsity team
PE	118	Beginning Soccer	1	F,Sp,Su	none
PE	121	Softball	1	F,Sp,Su	none
PE	123	Beg Volleyball	1	A	none
PE	124	Interm Volleyball	1	F, Sp,W	PE 123 or equiv
PE	139	Beginning Tennis	1	F,Sp,Su	none
PE	140	Interm Tennis	1	F,Sp,Su	PE 139
PE	141	Advanced Tennis	1	F,Sp,Su	PE 140 or permission
PE	166	Beg Swimming	1	A	none
PE	167	Interm Swimming	1	F,W,Sp	PE 166 or equiv
PE	169	Water Fitness	1	A	none
PE	171	Water Fit/Power	1	F,W	PE 167 or equiv
PE	181	Social Dance	1	F,W,Sp	none
PE	185	Intro Mod Dance	1	F,W,Sp	none
PE	192	Folk Dance	1	S	none
PE	195	Beg Jazz Dance	1	A	none
PE	202	Beginning Yoga	1	A	none
PE	203	Intermediate Yoga	1	A	PE 202 or equiv
PE	212	Beginning Karate	1	A	none
PE	213	Interm Karate	1	W,Sp	PE 212 or perm
PE	262	PE Elem School	3	Sp	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

PHYSICAL SCIENCE

School of Humanities and Science
Division of Sciences
Technology Building Room 416 967-4150

Faculty

Professors: Carl Jensen, Irina Nelson; *Associate Professor:* Frank Komatar; *Assistant Professor:* Don Nielson; *Instructor:* Linda Chandler

The Program

Physical Science includes the study of physics, chemistry, geology, geography and astronomy. All classes are transferable to other schools in the state system of higher education and most other universities and colleges.

Physics classes are offered at three levels: (1) general survey classes for filling a general education requirement for non-technical students; (2) a non-calculus three quarter series for professionals and technicians (other than engineers), and (3) a three quarter series of calculus oriented physics for pre-engineering students.

Chemistry classes are offered at four levels: (1) a general one quarter survey class for filling general education requirements for non-technical students; (2) a Health Science series of inorganic, organic, and biochemistry; (3) a three quarter series of inorganic chemistry for pre-engineering students; and (4) a three quarter series of organic chemistry.

The physical geology and astronomy are general in nature and can be used to fill a physical science general education requirement for associate degrees..

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

ASSOCIATE OF SCIENCE DEGREE

(Minimum 100 Credit Hours Required)

The AS Degree in Physical Science requires a minimum of 100 credit hours of transferable credit with a cumulative grade point average of 2.0 or better. (2.5 or better is recommended for transfer) The elective hours may be chosen to coincide with the student's chosen emphasis.

Suggested First Quarter
Courses may be taken in any order as long as prerequisite requirements are met.

Course			Cr	Taught*	Prerequisites
General Requirements (51 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	(any apprvd COM)		3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ ENG	102	English Comp	4	A	ENG 101
___ MTH	105	Col Algebra	5	A	MTH 101
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
or					
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science			5	A	variable
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science			5	A	variable
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (49 credits)
Science Core (34 credits) - Three options

___ **Physics Option:**					
CS	150	PASCAL	4	F,W,Sp	ENGR 101
or					
CS	170	FORTRAN	4	A	MTH 106, CIS 101, ENGR 101, w/MTH 111
or					
CS	180	C Language	4	A	ENGR 102 or CS 150
MTH	111	Calculus I	5	A	MTH 106
MTH	112	Calculus II	5	A	MTH 111
MTH	113	Calculus III	5	A	MTH 112
PHY	171	Engr Physics I	4	F,W	MTH 111, w/PHY181
PHY	172	Engr Physics II	4	W,Sp	PHY 171, w/PHY182
PHY	173	Engr Phys III	4	F,Sp,Su	PHY 172, w/PHY 183
PHY	181	Engr Phys I Lab	1	F,W	w/PHY 171
PHY	182	Engr Phys II L	1	W,Sp	w/PHY 172
PHY	183	Engr Phys III L	1	F,Sp,Su	w/PHY 173
___ **Chemistry Option:**					
CHEM	121	Prcpl Chem I	5	F,W,Sp	MTH 105
CHEM	122	Prcpl Chem II	5	W,Sp	CHEM 121
CHEM	123	Prcpl Chem III	5	Sp,Su	CHEM 122
CS	150	PASCAL	4	F,W,Sp	ENGR 101
or					
CS	170	FORTRAN	4	A	MTH 106, CIS 101, ENGR 101, w/MTH 111
or					
CS	180	C Language	4	A	ENGR 102or CS 150

MTH	111	Calculus I	5	A	MTH 106
MTH	112	Calculus II	5	A	MTH 111
MTH	113	Calculus III	5	A	MTH 112

Science Option:

CHEM	121	Prcpl Chem I	5	F,W,Sp	MTH 105
CS	150	PASCAL	4	F,W,Sp	ENGR 101
		or			
CS	170	FORTRAN	4	A	MTH 106, CIS 101, ENGR 101, w/MTH 111
		or			
CS	180	C Language	4	A	ENGR 102,or CS 150
GEOL	101	Physical Geol	5	A	none
MTH	111	Calculus I	5	A	MTH 106
MTH	112	Calculus II	5	A	MTH 111
MTH	113	Calculus III	5	A	MTH 112
PHY	171	Engr Physics I	4	F,W	MTH 111, w/PHY181
PHY	181	Engr Phys I Lab	1	F,W	w/PHY 171

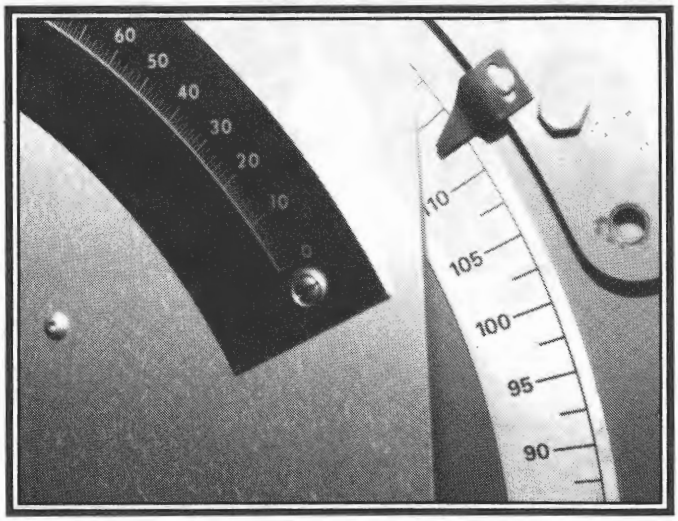
Electives (choose 15 hours)
Fine Arts, Social Science, Physical Science, Life Science, Communications, Languages

DEPARTMENTAL OFFERINGS

(Courses administered by the Physical Science Department)

Course			Cr	Taught*	Prerequisites
CHEM	101	Intro to Chem	5	A	none
CHEM	121	Prcpl Chem I	5	F,W,Sp	MTH 105
CHEM	122	Prcpl Chem II	5	W,Sp	CHEM 121
CHEM	123	Prcpl Chem III	5	Sp,Su	CHEM 122
CHEM	140	Elem Chem	5	A	MTH 101
CHEM	141	El Org Chem	5	W,Su	CHEM 140
CHEM	142	Elem Biochem	5	Sp, Su	CHEM 141
CHEM	231	OrgChem I	5	F	CHEM 123
CHEM	232	Org Chem II	5	W	CHEM 231, w/CHEM 242
CHEM	233	Org Chem III	5	Sp	CHEM 232 w/CHEM 243
CHEM	242	Chem Lab I	1	W	w/CHEM 232
CHEM	243	Chem Lab II	0	Sp	w/CHEM 233
GEOG	120	E/Sfc Envir	5	F,W,Sp	none
GEOG	160	Cultural Geog	5	F,W,Sp	none
GEOL	101	Physical Geol	5	A	none
PHY	101	Intro Physics	5	A	MTH 101
PHY	105	Descrp Physics	5	A	none
PHY	117	Mechanics	5	A	MTH 106, or ELET 106
PHY	118	Ht,Lgt,Snd	5	W,Sp,Su	PHY 117
PHY	119	Elec Mag Mod	5	Sp,Su	PHY 118
PHY	125	Spec Std PS	1-2	Sp	permission
PHY	127	Descrp Astrom	5	A	none
PHY	171	Engr Physics I	4	F,W	MTH 111, w/PHY181
PHY	172	Engr Physics II	4	W,Sp	PHY 171, w/PHY182
PHY	173	Engr Phys III	4	F,Sp,Su	PHY 172, w/PHY 183
PHY	181	Engr Phy Labs	1	A	none
PHY	182	Engr Phy Labs	1	A	none
PHY	183	Engr Phy Labs	1	A	none
PHY	274	Phy Sci Engrs	3	W	MTH 292 & PHY 173
PT	110	Prcpl of Tech I	4-5	A	MTH 099
PT	111	Prcpl of Tech II	4-5	A	PT 110

*A=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



PRE-ENGINEERING

School of Humanities and Sciences
Division of Sciences
Technology Building Room 416 967-4150

Pre-Engineering/Chemical,
Pre-Engineering/Civil,
Pre-Engineering/Computer Science,
Pre-Engineering/Electrical,
Pre-Engineering/Manufacturing
Pre-Engineering/Materials Science,
Pre-Engineering/Mechanical

Faculty

Associate Professor: Tom Davies; *Assistant Professor:* Hassan Mohsenian; *Instructors:* Nick Safai, Richard Warnock

The Program

Chemical Engineering emphasizes physical, life, and engineering sciences to convert raw materials into necessary materials and energy systems. Civil Engineering involves planning, designing, and construction of physical facilities. Computer Science focuses on design and use of computers to solve and analyze math and physics problems. Electrical Engineering is a branch of applied physics which uses mathematical concepts to analyze and design electrical devices and systems. Materials Science Engineering involves chemistry and physics to develop scientific and engineering aspects of materials. Mechanical Engineering also uses math and physics to analyze and design mechanical devices and machine systems.

Preparation Note

Each program requires as a prerequisite a science oriented high school curriculum which includes as much mathematics, chemistry, physics, and English as possible. Students who do not qualify to enter MTH 111, CEM 121 and ENG 101 should take prerequisite courses before entering the first quarter of their program. Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $100 - $150 per quarter

ASSOCIATE OF SCIENCE DEGREE

PRE-ENGINEERING/CHEMICAL

(Minimum 126 Credit Hours Required)

Suggested First Quarter			Credits
CHEM	121	Principles of Chemistry I	5
ENG	101	English Composition	4
ENGR	101	Introduction to Engineering I	3
MTH	111	Calculus I	5
PE		Elective	1

Course			Cr	Taught*	Prerequisites
General Requirements (52 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ CS	170	FORTRAN Prg	4	A	MTH 106, CIS101 or ENGR101,wMTH111
___ ENG	101	English Comp	4	A	pre-test
___ ENG	130	Technical Wrtg	4	A	ENG 101
___ MTH	111	Calculus I	5	A	MTH 106 or equiv
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science					
- take BIOL 101/102			5	A	none
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science					
- take CHEM 121			5	F,W,Sp	MTH 105
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (74 credits)

Science Core (54 credits)					
___ CHEM	122	Prcpl Chem II	5	W,Sp	CHEM 121
___ CHEM	123	Prcpl ChemIII	5	Sp,Su	CHEM 122
___ CHEM	231	Org Chem I	5	F	CHEM 123
___ CHEM	232	Org Chem II	4	W	CHEM 231, w/242
___ CHEM	242	Org Chem Lb	1	W	w/CHEM 232
___ MTH	112	Calc II	5	A	MTH 111
___ MTH	113	Calc III	5	A	MTH 112
___ MTH	291	Or Dif Equ	3	F,W	MTH 113
___ MTH	292	Mat Vct Ana	3	W,Sp	MTH 291
___ MTH	293	Part'l Dif Eq	3	Sp,Su	MTH 292
___ PHY	171	Engr Phy I	4	F,W	MTH 111, w/PHY 181
___ PHY	181	Engr Lab	1	F,W	w/ PHY 171
___ PHY	172	Engr II	4	W,Sp	PHY 171, w/PHY 182
___ PHY	182	Engr Lab	1	W,Sp	w/PHY 172
___ PHY	173	Engr Phy III	4	F,Sp,Su	PHY 172, w/PHY 183
___ PHY	183	Engr Lab	1	F,Sp,Su	w/PHY 173
Pre-Engineering Core (20 credits)					
___ CHE	210	Pr Engr I	3	F	CHEM 123, PHY171 MTH 291
___ CHE	211	Pro Engr II	3	Sp	CHEM 210, 260
___ CHE	260	Thermodyn	4	W	MTH 291, PHY 173
___ CS	276	Mth FT 77	4	W,Sp	MTH 112, 291, CS 170, OIS 107
___ ENGR	101	Intro Engr I	3	F,W	CIS 101 or equiv w/MTH 106
___ ME	130	Statics	3	A	MTH 112, PHY 171

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF SCIENCE DEGREE

PRE-ENGINEERING/CIVIL

(Minimum 128 Credit Hours Required)

Suggested First Quarter			Credits
CHEM	121	Principles of Chemistry I	5
ENG	101	English Composition	4
ENGR	101	Introduction to Engineering I	3
MTH	111	Calculus I	5
PE		Elective	1

Course			Cr	Taught*	Prerequisites
General Requirements (52 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ CS	170	FORTRAN Prg	4	A	MTH 106, CIS101 or ENGR101, w/MTH111
___ ENG	101	English Comp	4	A	pre-test
___ ENG	130	Technical Wrtg	4	A	ENG 101
___ MTH	111	Calculus I	5	A	MTH 106 or equiv
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		or			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science					
- take BIOL 101/102			5	A	none
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science					
- take CHEM 121			5	F,W,Sp	MTH 105
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (76 credits)

Science Core (44 Credits)

___	CHEM	122	Prcpl Chem II	5	W,Sp	CHEM 121
___	GEOL	101	Phys Sci	5	A	none
___	MTH	112	Calc II	5	A	MTH 111
___	MTH	113	Calc III	5	A	MTH 112
___	MTH	291	Or Dif Equ	3	F,W	MTH 113
___	MTH	292	Mat Vct Ana	3	W,Sp	MTH 291
___	MTH	293	Part'l Dif Eq	3	Sp,Su	MTH 292
___	PHY	171	Engr Phy I	4	F,W	MTH 111, w/PHY 181
___	PHY	181	Engr Lab	1	F,W	w/ PHY 171
___	PHY	172	Engr Phy II	4	W,Sp	PHY 171, w/PHY 182
___	PHY	182	Engr Lab	1	W,Sp	w/PHY 172
___	PHY	173	Engr Phy III	4	F,Sp,Su	PHY 172, w/PHT 183
___	PHY	183	Engr Lab	1	F,Sp,Su	w/PHY 173

Pre-Engineering Core (32 credits)

___	CV	130	Statics	3	F,Sp, Su	MTH 112, PHY 171
___	CV	202	Cpt & Cmptr	4	W,Su	MTH 291, CS 170
___	CV	203	Eng Fld Mest	4	Sp	None
___	CV	231	Sth of Mtl I	3	Sp	CV 130, W/MTH 113
___	CV	234	Dynamics	3	W	CV 130, MTH 112
___	CV	238	Sth Mtl Lab	3	Sp	CV 231
___	EE	107	Elect & Inst	5	Sp	MTH 292, PHY172
___	ENGR	101	Intro Engr I	3	F,W	CIS 101 or equiv, w/MTH 106 X
___	ME	210	Stat & Metro	4		MTH 112, PHY 171

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF SCIENCE DEGREE

PRE-ENGINEERING/ COMPUTER SCIENCE

(Minimum 114 Credit Hours Required)

Suggested First Quarter			Credits
CHEM	121	Principles of Chemistry I	5
ENG	101	English Composition	4
ENGR	101	Introduction to Engineering I	3
MTH	111	Calculus I	5
PE		Elective	1

Course				Cr	Taught*	Prerequisites
General Requirements (52 credits)						
Core Academic Skills						
___	COM	110	Org Intpl Com	3	A	none
___	CS	150	PASCAL Prg	4	F,W,Sp	ENGR 101
___	ENG	101	English Comp	4	A	pre-test
___	ENG	130	Technical Wrtg	4	A	ENG 101
___	MTH	111	Calculus I	5	A	MTH 106 or equiv
___	PE		Physical Educ	2	A	none
American Institutions						
___	HIS	170	American Civ or	5	A	none
___	POLI	110	Am Ntl Gov	5	A	none
General Education						
___	Biological Science - take BIOL 101/102			5	A	none
___	Humanities			5	A	variable
___	Interdisciplinary Course			5	A	variable
___	Physical Science - take CHEM 121			5	F,W,Sp	MTH 105
___	Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (62 credits)

Science Core (31 credits)

___	MTH	112	Calc II	5	A	MTH 111
___	MTH	113	Calc III	5	A	MTH 112,
___	MTH	291	Ord Dif Equ	3	F,W	MTH 113
___	MTH	292	Mat Vct Ana	3	W,Sp	MTH 291
___	PHY	171	Engr Phy I	4	F,,SpW	MTH 111, w/PHY 181
___	PHY	181	Engr Lab	1	F,W	w/ PHY 171
___	PHY	172	Engr II	4	W,Sp	PHY 171, w/PHY 182
___	PHY	182	Engr L ab	1	W,Sp	w/PHY 172
___	PHY	173	Engr Phy III	4	F,Sp,Su	PHY 172, w/PHY 183
___	PHY	183	Engr Lab	1	F,Sp,Su	w/PHY 173

Pre-Engineering Core (31 credits)

___	CS	151	Algth & Data	4	Sp	CS 150
___	CS	180	C Language	4	Sp,Su	CS 150
___	CS	215	Assm Prog	4	W	CIS 151 or perm
___	CS	231	Disc Struct	4	F	CS 151, MTH 101
___	CS	243	Cmptr Arch I	4	W	EE 210, CS 150
___	CS	280	Cmptr Arch II	4	Sp	CS 243
___	EE	210	Int Digit Sys	4	F,Sp,Su	MTH 105
___	ENGR	101	Int Engr I	3	F,W	w/MTH 106, CL 101 or equiv

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF SCIENCE DEGREE

PRE-ENGINEERING/ELECTRICAL

(Minimum 120 Credit Hours Required)

Suggested First Quarter			Credits
CHEM	121	Principles of Chemistry I	5
ENG	101	English Composition	4
ENGR	101	Introduction to Engineering I	3
MTH	111	Calculus I	5
PE		Elective	1

Course				Cr	Taught*	Prerequisites
General Requirements (52 credits)						
Core Academic Skills						
___	COM	110	Org Intpl Com	3	A	none
___	CS	170	FORTRAN Prg	4	A	MTH 106, CIS101 or ENGR101,wMTH111
___	ENG	101	English Comp	4	A	pre-test
___	ENG	130	Technical Wrtg	4	A	ENG 101
___	MTH	111	Calculus I	5	A	MTH 106 or equiv
___	PE		Physical Educ	2	A	none

American Institutions

___	HIS	170	American Civ	5	A	none
			or			
___	POLI	110	Am Ntl Gov	5	A	none

General Education

___	Biological Science - take BIOL 101/102	5	A	none
___	Humanities	5	A	variable
___	Interdisciplinary Course	5	A	variable
___	Physical Science - take CHEM 121	5	F,W,Sp	MTH 105
___	Social Science	5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (68 credits)

Science Core (42 credits)

	CHEM	122	Prcpl Chem II	5	W,Sp	CHEM 121
___	MTH	112	Calc II	5	A	MTH 111
___	MTH	113	Calc III	5	A	MTH 112
___	MTH	291	Or Dif Equ	3	F,W	MTH 113
___	MTH	292	Mat Vct Ana	3	W,Sp	MTH 291
___	MTH	293	Part'l Dif Eq	3	Sp,Su	MTH 292
___	PHY	171	Engr Phy I	4	F,W	MTH 111, w/PHY 181
___	PHY	181	Engr Lab	1	F,W	w/ PHY 171
___	PHY	172	Engr Phy II	4	W,Sp	PHY 171, w/PHY 172
___	PHY	182	Engr Lab	1	W,Sp	w/PHY 172
___	PHY	173	Engr Phy III	4	F,Sp,Su	PHY 172, w/PHY 183,
___	PHY	183	Engr Lab	1	F,Sp,Su	w/PHY 173
___	PHY	274	Phy for Sci	3	W	MTH 292, PHY 173

Pre-Engineering Core (26 credits)

___	CS	150	PASCAL Prg	4	F,W,Sp	ENGR 101
___	EE	210	Intro Dig Sys	4	F,Sp,Su	MTH 105
___	EE	221	Intro Elec Cir	5	F	PHY 172, w/MTH 291, EE 233
___	EE	222	Elec Cir	5	W	EE 221, 233
___	EE	233	Eletr Mes	2	F	w/EE 221
___	EE	261	Elec Prop Sl	3	W	EE 221, CHEM 122, PHY 173
___	ENGR	101	Intro Engr I	3	F,W	CL 101 or equiv w/MTH 106

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF SCIENCE DEGREE

PRE-ENGINEERING/MANUFACTURING

(Minimum 110 Credit Hours Required)

Suggested First Quarter		Credits
CHEM 121	Principles of Chemistry I	5
ENG 101	English Composition	4
ENGR 101	Introduction to Engineering I	3
MTH 111	Calculus I	5
PE	Elective	1

Course	Cr	Taught*	Prerequisites

General Requirements (52 credits)

Core Academic Skills

___	COM	110	Org Intpl Com	3	A	none
___	CS	150	PASCAL Prg	4	F,W,Sp	ENGR 101
___	ENG	101	English Comp	4	A	pre-test
___	ENG	130	Technical Wrtg	4	A	ENG 101
___	MTH	111	Calculus I	5	A	MTH 106 or equiv
___	PE		Physical Educ	2	A	none

American Institutions

___	HIS	170	American Civ	5	A	none
			or			
___	POLI	110	Am Ntl Gov	5	A	none

General Education

___	Biological Science - take BIOL 101/102	5	A	none
___	Humanities	5	A	variable
___	Interdisciplinary Course	5	A	variable
___	Physical Science - take CHEM 121	5	F,W,Sp	MTH 105
___	Social Science	5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (58 credits)

Science Core (34 credits)

___	MTH	112	Calc II	5	A	MTH 111
___	MTH	113	Calc III	5	A	MTH 112
___	MTH	291	Or Dif Equ	3	F,W	MTH 113
___	MTH	292	Mat Vct Ana	3	W,Sp	MTH 291
___	MTH	293	Prtl Dif Eq	3	Sp,Su	MTH 292
___	PHY	171	Engr Phy I	4	F,W	MTH 111, w/PHY 181
___	PHY	181	Engr Lab	1	F,W	w/ PHY 171
___	PHY	172	Engr Phy II	4	W,Sp	PHY 171, w/PHY 182
___	PHY	182	Engr Lab	1	W,Sp	w/PHY 172
___	PHY	173	Engr Phy III	4	F,Sp,Su	PHY 172, w/PHY 183
___	PHY	183	Engr Lab	1	F,Sp,Su	w/PHY 173

Pre-Engineering Core (24 credits)

___	CS	276	FORTAN	4	W,Sp	OIS 107, MTH 112 ,291, CS 170
___	CV	130	Statics	3	F,Sp,Su	MTH 112, PHY 171
___	CV	234	Dynamics I	3	W	CV 130, MTH 112
___	ENGR	101	Intr Engr I	3	F,W	CL 101, w/MTH 106
___	ENGR	103	Int Engr III	4	Sp,Su	CD 110 or HS draft
___	MFG	170	Manuf Proc	3	Sp	MFG 150
___	MSE	216	El Matr/Entr	4	F,Sp,Su	ME 130, CHEM 122

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF SCIENCE DEGREE

PRE-ENGINEERING/ MATERIALS SCIENCE

(Minimum 124 Credit Hours Required)

Suggested First Quarter		Credits
CHEM 121	Principles of Chemistry I	5
ENG 101	English Composition	4
ENGR 101	Introduction to Engineering I	3
MTH 111	Calculus I	5
PE	Elective	1

Course			Cr	Taught*	Prerequisites
General Requirements (52 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ CS	170	FORTRAN Prg	4	A	MTH 106, CIS101 or ENGR101,wMTH111
___ ENG	101	English Comp	4	A	pre-test
___ ENG	130	Technical Wrtg	4	A	ENG 101
___ MTH	111	Calculus I	5	A	MTH 106 or equiv
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		OR			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science					
- take BIOL 101/102			5	A	none
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science					
- take CHEM 121			5	F,W,Sp	MTH 105
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (72 credits)

Science Core (53 credits)					
___ CHEM	122	Prcpl Chem II	5	W,Sp	CHEM 121
___ CHEM	231	Org Chem I	5	F	CHEM 123
___ CHEM	232	Org Chem II	4	W	CHEM 231, w/CHEM 242
___ CHEM	242	Org C Lab I	1	W	w/CHEM 232
___ MTH	112	Calc II	5	A	MTH 111
___ MTH	113	Calc III	5	A	MTH 112
___ MTH	291	Or Dif Equ	3	F,W	MTH 113
___ MTH	292	Mat Vct Ana	3	W,Sp	MTH 291
___ MTH	293	Part'l Dif Eq	3	Sp,Su	MTH 292
___ PHY	171	Engr Phy I	4	F,W	MTH 111, w/PHY 181
___ PHY	181	Engr Phy Lab	1	F,W	w/ PHY 171
___ PHY	172	Engr Phy II	4	W,Sp	PHY 171, w/PHY 182
___ PHY	182	Engr Lab	1	W,Sp	w/PHY 172
___ PHY	173	Engr Phy III	4	F,Sp,Su	PHY172, w/PHY 183
___ PHY	183	Engr Phy Lab	1	F,Sp,Su	w/PHY 173
___ CS	170	FORTRAN	4	A	MTH 106, CIS 101, or ENGR 101, w/MTH 111.
Pre-Engineering Core (19 credits)					
___ ENGR	101	Int Engr I	3	F,W	CL 101 or equiv, w/MTH 106
___ ENGR	103	Int Engr III	4	Sp,Su	CD 110 or HS draft
___ ME	130	Statics	3	A	MTH 112, PHY171
___ MSE	260	Mat Sci Eng I	3	F	CHEM 123
___ MSE	261	Mat Sci II	3	W	MSE 260
___ MSE	270	Exp in Mat	3	Sp	MSE 261

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF SCIENCE DEGREE

PRE-ENGINEERING/MECHANICAL

(Minimum 127 Credit Hours Required)

Suggested First Quarter		Credits
CHEM	121 Principles of Chemistry I	5
ENG	101 English Composition	4
ENGR	101 Introduction to Engineering I	3
MTH	111 Calculus I	5
PE	Elective	1

Course			Cr	Taught*	Prerequisites
General Requirements (52 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ CS	170	FORTRAN Prg	4	A	MTH 106, CIS101 or ENGR101,wMTH111
___ ENG	101	English Comp	4	A	pre-test
___ ENG	130	Technical Wrtg	4	A	ENG 101
___ MTH	111	Calculus I	5	A	MTH 106 or eequiv
___ PE		Physical Educ	2	A	none
American Institutions					
___ HIS	170	American Civ	5	A	none
		OR			
___ POLI	110	Am Ntl Gov	5	A	none
General Education					
___ Biological Science					
- take BIOL 101/102			5	A	none
___ Humanities			5	A	variable
___ Interdisciplinary Course			5	A	variable
___ Physical Science					
- take CHEM 121			5	F,W,Sp	MTH 105
___ Social Science			5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (75 credits)

Science Core (39 credits)					
___ CHEM	122	Prcpl Chem II	5	W,Sp	CHEM 121
___ MTH	112	Calc II	5	A	MTH 111
___ MTH	113	Calc III	5	A	MTH 112
___ MTH	291	Or Dif Equ	3	F,W	MTH 113
___ MTH	292	Mat Vct Ana	3	W,Sp	MTH 291
___ MTH	293	Prtl Dif Eq	3	Sp,Su	MTH 292
___ PHY	171	Engr Phy I	4	F,W	MTH 111, w/PHY 181
___ PHY	181	Engr Lab	1	F,W	w/ PHY 171
___ PHY	172	Engr II	4	W,Sp	PHY 171, w/PHY 182
___ PHY	182	Engr Lab	1	W,Sp	w/ PHY 172
___ PHY	173	Engr Phy III	4	F,Sp,Su	PHY 172, w/PHY 183
___ PHY	183	Engr Lab	1	F,Sp,Su	w/PHY 173
Pre-Engineering Core (36 credits)					
___ CS	276	N FORT 77	4	W, Sp	MTH 112, 291, CS 170, OIS 107
___ EE	107	Elec & Instr	5	Sp	MTH 292, PHY172
___ ENGR	101	Intro Engr I	3	F,W	CL 101 or equiv, w/MTH 106
___ ENGR	103	Intro Engr II	4	Sp,Su	CD 110 or HS draft
___ ME	130	Statics	3	A	MTH 112, PHY 171
___ ME	210	Stats & Metro	4	W	MTH 112

___ ME	231	Sth of Mtl I	3	F	ME 130, ME 238, w/MTH 113 ME 238
___ ME	234	Dynamics I	3	W	ME 130, MTH 112
___ ME	235	Dynamics II	3	Sp	ME 234, MTH 291
___ ME	238	Sth of Mtl L	1	Sp	ME 231
___ ME	280	Modeling	3	Sp	MTH 291, PHY 173

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

PRINTING

School of Occupational Education
Division of Construction and Service Industries
Construction Trades Building Room 262 967-4074

Faculty
Audrey Nelson

The Program
The student learns the newest techniques in the broad field of Graphics Production including a full understanding of graphic design and layout, desktop publishing, stripping, plate making, camera work, press operation, and bindery. In the newest aspect of the printing industry, Desk Top Publishing, the student learns a variety of desk top publishing software including PageMaker, X-Press, Freehand, and Image Studio. The student learns both the new ways of scanning and computer editing of photographs as well as the traditional use of camera in halftone work. The course includes beginning, intermediate and advanced printing including an internship for SLCC press.

Although students can be admitted on an open entry weekly basis, students are encouraged to follow the quarter schedule. Classes are self-paced which allow the students to learn at their own pace. Individuals already working in the field are encouraged to enroll and upgrade their skills in this rapidly changing field.

All students should complete the General Printing course work and choose a minimum of one additional Emphasis.

Special Requirements
Good vision and attention to detail. Ability to handle high levels of stress.

Job Information
The student will be able to work with the latest hardware and software in desk top publishing including word processing programs. In addition, the student will be able to work with camera, shooting both line and halftone negatives, do basic and advance stripping, including four color stripping, and plate making, and work with quick printing and commercial printing.

Prerequisites
It is the student's responsibility to examine each course description for details prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $75 -$100

CERTIFICATE

DESKTOP PUBLISHING PRODUCTION

(Minimum 51 Credit Hours Required)

Suggested First Quarter			Credits
PRT	102	Layout and Paste-up Production	3
PRT	103	Desktop Publishing Design	3
PRT	105	Beginning Desktop Publishing	5
MGT	110	Small Business Management	3

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
Required (48 credits)					
___ MGT	110	Sm Bus Mgt	3	A	none
___ PRT	102	Layout/Paste-up	3	W,Su	none
___ PRT	103	Desktop Pub D	3	F,Sp	none
___ PRT	105	Beg Dsktp Pub	5	A	none
___ PRT	106	Beg XPress	3	F,Sp	none
___ PRT	108	Microsoft Word	3	W,Su	OIS 107 or equiv
___ PRT	113	MacDraw/Paint	3	W,Su	OIS 107 or equiv
___ PRT	114	Scanner Apl	3	F,Sp	PRT 105
___ PRT	128	SLCC Intern	10	TBA	permission
___ PRT	135	Adv PageMaker	3	F,Sp	PRT 104, 105
___ PRT	137	Adv XPress	3	W,Su	PRT 106
Option 1					
___ OIS	225	Beg Dsktp Pub	5	W,Sp,Su	OIS 112, 140, 212 or permission
___ PRT	110	Adv Freehand	3	F,Sp	PRT 105 or PRT 109
Option 2					
___ PRT	111	Beg Illustrator	3	W,Su	PRT 105
___ PRT	112	Adv Illustrator	3	F,Sp	PRT 111
___ **Electives** (3-5 credits required)					
BUS	101	Bus. English	3	A	none
BUS	115	Bus. Writing	3	A	BUS 101, ENG 101
COM	150	Mass Com	5	A	none
PRT	115	Multi Media	3	W,Su	PRT 105
PRT	116	Adv Imag Tech	3	W,Su	PRT 105

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

OFFSET PRESS PRODUCTION

(Minimum 54 Credit Hours Required)

Suggested First Quarter			Credits
PRT	101	General Printing	7
PRT	104	Beg PageMaker	3
PRT	127	Binding and Finishing	3

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
Required (51 credits)					
___ MGT	110	Sm Bus Mgt	3	A	none
___ PRT	101	Gen Printing	7	A	none
___ PRT	104	Beg PageMaker	3	A	OIS 107 or equiv
___ PRT	119	Beg Strp Plate	5	W,Su	PRT 101
___ PRT	121	Beg Printing	5	W,Su	PRT 101
___ PRT	122	Adv Quick Prtg	5	F,Sp	PRT 121
___ PRT	123	Beg Cmrcl Prtg	5	W,Su	PRT 101
___ PRT	125	Int Cmrcl Prtg	5	F,Sp	PRT 123
___ PRT	127	Bind/Finishing	3	F,Sp	none
___ PRT	128	SLCC Intern	10	TBA	permission
___ **Electives** (3-5 credits required)					
BUS	101	Bus. English	3	A	none
BUS	115	Bus. Writing	3	A	BUS 101, ENG 101
COM	150	Mass Com	3	A	none
PRT	126	Adv Cmcrl Prtg	5	W,Su	PRT 125

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

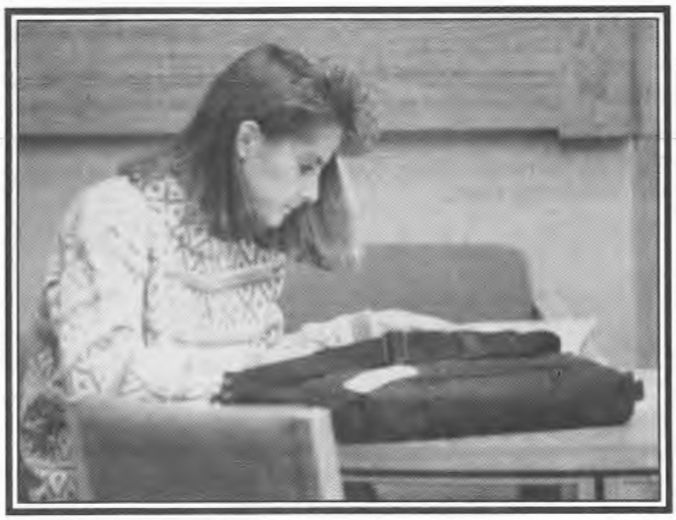
PRE - PRESS

Minimum 52 Credit Hours Required)

Suggested First Quarter			Credits
PRT	101	General Printing	7
PRT	104	Beginning PageMaker	3
PRT	127	Binding and Finishing	3

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
Required (49 credits)					
___ MGT	110	Sm Bus Mgt	3	A	none
___ PRT	101	Gen Printing	7	A	none
___ PRT	104	Beg PageMaker	3	A	OIS 107 or equiv
___ PRT	117	Beg Camera	5	W,Su	PRT101
___ PRT	118	Adv Camera	5	F,Sp	PRT 117
___ PRT	119	Beg Strp Plate	5	W,Su	PRT 101
___ PRT	120	Adv Strp Plate	5	F,Sp	PRT 119
___ PRT	127	Bind/Finishing	3	F,Sp	none
___ PRT	128	Press Intern	10	TBA	permission
___ PRT	135	Adv PageMaker	3	F,Sp	PRT 104 , 105
___ **Electives** (3 credits required)					
BUS	101	Bus. English	3	A	none
BUS	115	Bus. Writing	3	A	BUS 101, ENG 101
COM	150	Mass Com	5	A	none
OIS	107	Beg Key Brdg	3	A	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



PRODUCTION MANAGEMENT

School of Business and Technology
Division of Business Systems
Business Building Room 105 967-4325

Faculty

Professors: Kathryn C. Beebe, Bob Cox; *Associate Professor:* Durant Black; *Assistant Professors:* Kim Richardson, Lynn Suksdorf; *Instructors:* Bob Foster, Don Gren

The Program

The Production Management program trains students to successfully enter careers as Production Schedulers, Production Planners, Materials Managers, Engineering Assistants, Statistical Quality Control Technicians, Inventory Control Technicians, Plant Layout, and Facilities Managers. The program will include specific classes in Production Management, Inventory and Materials Management, Quality Assurance, Statistics, and other classes in the areas of Business, Math, and Communications. This Degree Program is subject to approval by the Board of Regents. ***If students desire to transfer to a four-year college they should pursue the Associate of Science Degree.***

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete a degree. The classes designed to assist students in reaching the skill level necessary to enter the certificate and degree programs are: BUS 080 (Business Mathematics), BUS 101 (Business English), CIS 102 (Computer Information Systems), MTH 101 (Intermediate Algebra), OIS 108 (WordPerfect for Non-OIS Majors). Any class in the preparatory skills may be waived if the student can demonstrate equivalent skill.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. Credit earned from MGT 200 is applied toward graduation requirements as Business Elective credit.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply costs: $125-$150 per quarter

CERTIFICATE

(52 Credit Hours Required)

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	101	Introduction to Business	4

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ ACCT	101	Elem Acct I	4	A	FIN 138 or w/ FIN 138
___ ACCT	102	Elem Acct II	4	A	ACCT 101,FIN 138
___ BUS	115	Bus Com	3	A	BUS 101, ENG 101
___ CIS	140	Bus Cmptr Apl	3	A	ACCT 101, CIS 102
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	Eng Comp	4	A	pre-test
___ FIN	120	Prsnl Finance	4	A	none
___ FIN	138	Fin Math	5	A	pre-test
___ MGT	101	Intro to Bus	4	A	none
___ MGT	160	Prcpl of Supv	5	A	none
___ MGT	205	Lgl Envr Bus	5	A	none
___ MKTG	103	Intro to Mrktg	5	A	none
___ TRM	101	Intro Dist Sys	3	A	none
___					

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 100 Credit Hours Required)

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
MTH	105	College Algebra	5
MGT	101	Introduction to Business	4

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ MTH	105	Col Algebra	5	A	MTH 101
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (71 credits)

___	ACCT 101	Elem Acct I	4	A	FIN 138 or w/FIN 138
___	ACCT 102	Elem Acct II	4	A	ACCT 101, FIN 138
___	ACCT 203	Mgrl Acct	4	A	ACCT 102
___	BUS 115	Bus Com	3	A	BUS 101, ENG 101
___	BUS 230	Bus Rpt Wrtg	3	F,W,Sp	BUS 115
___	CIS 140	Bus Cmptr Apl	3	A	ACCT 101, CIS 102
___	ECN 202	Micro Ecn	4	A	MGT 101
___	MGT 101	Intr to Bus	4	A	none
___	MGT 160	Prcpl of Supv	5	A	none
___	MGT 205	Lgl Envr Bus	5	A	none
___	MGT 220	Bus Stat I	4	A	MGT 101, MTH 101
___	MGT 223	Wrk Dsgn/Mes	4	W	CIS 140
___	MGT 225	Prod Mgt	4	W,Sp	MGT 101, MGT 220
___	MGT 230	Bus Stat II	4	A	MGT 220, MTH 105
___	MGT 235	Intgr Prod Sys	5	Sp	MGT 225
___	MGT 260	Stat Qlty Ctrl	3	W,Sp	MGT 220
___	MGT 270	Mgt Auto Mftg	5	Sp	MGT 223, MGT 225
___	TRM 101	Intro Dist Sys	3	A	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF SCIENCE DEGREE

(Minimum 96 Credit Hours Required)

Students desiring to transfer to four-year colleges should pursue this degree.

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	105	Business Law I	5

Course			Cr	Taught*	Prerequisites
General Requirements (52 credits)					
Core Academic Skills					
___	CIS 102	CIS Intro	4	A	none
___	COM 110	Org Intpl Com	3	A	none
___	ENG 101	English Comp	4	A	pre-test
___	ENG 102	English Comp	4	A	ENG 101
___	MTH 105	Col Algebra	5	A	MTH 101
___	PE	Physical Educ	2	A	none
American Institutions					
___	HIS 170	American Civ	5	A	none
		or			
___	POLI 110	Am Ntl Gov	5	A	none
General Education					
___	Biological Science		5	A	variable
___	Humanities		5	A	variable
___	Interdisciplinary Course		5	A	variable
___	Physical Science		5	A	variable
___	Social Science		5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

Major Course Requirements (45 credits)

___	ACCT 101	Elem Acct I	4	A	FIN 138 or w/FIN 138
___	ACCT 102	Elem Acct II	4	A	ACCT 101, FIN 138
___	ACCT 203	Mgrl Acct	4	A	ACCT 102
___	BUS 115	Bus Com	3	A	BUS 101, ENG 101
___	BUS 215	Calc for Bus**	4	A	MTH 105
___	ECN 201	Macro Ecn	4	A	MGT 101
___	ECN 202	Micro Ecn	4	A	MGT 101
___	FIN 138	Fin Math	5	A	pre-test
___	MGT 205	Lgl Envr Bus	5	A	none
___	MGT 220	Bus Statistics I	4	A	MGT 101, MTH 101
___	MGT 230	Bus Statistics II	4	A	MGT 220, MTH 105

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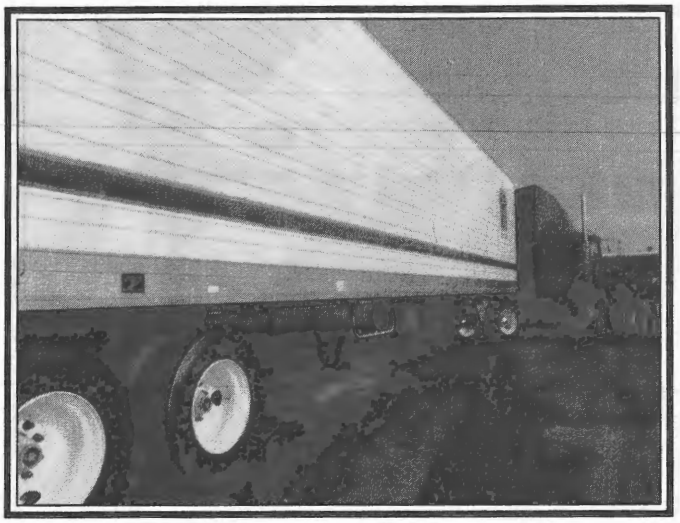
** BUS 215 is not required for Business Education and Marketing Education majors at some four-year universities and colleges.

☞ COM 120, PSY 101 and SOC 101 are recommended if transferring to the University of Utah. (One course in philosophy must be taken after transferring there.)



PROFESSIONAL TRUCK DRIVING

School of Occupational Education
Division of Mechanics
Riverside Campus 328-5500

Suggested First Quarter
This is an open entry/open exit program. Students may enroll any time and complete when they meet the educational objectives.
The hours completed do not apply toward other college programs.

Faculty

Instructors: Al Drechsel, Gary Martin, George Miyatake.

General Information

The program consists of instruction in the history and growth of the transportation industry, driver qualifications, safe driving techniques, state and federal laws governing transportation, preventive maintenance, trouble shooting, fire procedures, record keeping, and filing accident reports.

Emphasis is placed on actual experience in field driving. Equipment used consists of semi-trailers and over-the-road diesel tractors and trailers.

The Average length of this course is seven weeks (280) hours, with 56 hours of classroom, 56 hours of lab and 168 hours driving behind the wheel. Classes are generally Monday through Friday from 7:30 a.m. until 4:00 p.m. This may vary with long run schedules. Only three students may be accommodated per class.

Special Requirements

1. Commercial Drivers License Permit
   - ° Utah State Requirements for Commercial Driver's License Permit
   - ° D.O.T. Physical ($24 fee)
   - ° Social Security Card. If none, W-4 or Tax Return
   - ° Submit License for Written Test
   - ° $30 Cost plus $5 per Endorsement for written portion only

   *Balance of $50.00 due upon application for Road Test

2. The student must be willing and able to work any shift required by a prospective employer and pass Drug Screen.
3. A copy of Motor Vehicle driving record is required ($3). There can be no DUI's or major offenses on the record. The majority of employers require drivers who are bondable.
4. Basic reading and math skills, along with eye/hand/foot coordination.

Job Information

Students who complete the program will be able to drive gasoline or diesel-powered or tractor-trailer combinations (long distance or in-state). If not employed at completion of the program, Job Club (60 hours) will assist the student with job placement.

Cost and Supplies

$1,400

COMMERCIAL DRIVERS LICENSE PREPARATORY CLASS FOR "CLASS A" ONLY
5 days at 4 hrs/day. Tuition is $50, which doesn't include Utah Motor Vehicle Registration written test fee of $30.

Enrollment is restricted to students intending to enroll in the Skills Center Professional Driving Program. Others should contact SLCC Continuing Education to enroll in a CDL only program. The standard application and assessment fees ($25.00) are required in anticipation of enrolling in the Professional Driving Program.

Air Brakes
Combinations
General Knowledge

PROFESSIONAL DRIVING COURSE OF STUDY

Intro to Professional Driving
- Regulations
- History of Industry
- Attitude

Intro to Vehicle and Trailer
- Parts & function & CDL
- Pre-trip and Post-trip Inspection
- Safety Equipment
- Coupling and Uncoupling

Control Systems
- Function and Operation of Controls, e.g., gear shift, tachometer, instruments, etc.
- Air Brakes Parts and Use
- Hydraulic Brakes

Basic Control
- Starting and Stopping
- Backing
- Turning
- Parking
- Vehicle in Motion

Safety
- Visual Search
- Communication
- Speed and Space Management
- Steering and Braking Practices
- Recognizing Hazards

Extreme Driving Conditions
- Hot and Cold Weather
- Stormy Conditions, Chains
- Mountain Terrain
- Skid Control and Recovery

REAL ESTATE

School of Continuing &Community Education
Division of Continuing Education
Construction Trades Building Room 258 967-4106

Director Barbara Pomeranz

The Program

The Real Estate program is designed to prepare the student to qualify to take the State of Utah Real Estate examination. It is a 90 clock hour program.

We recommend that both REE 101 and REE 153 be taken concurrently. Certificates of Achievement are awarded upon completion.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $50

Suggested First Quarter
Courses may be taken in any order.

Course		Cr	Taught*	Prerequisites
Major Course Requirements				
___ REE 101	Intro Rl Estate	5	F,W,Sp	none
___ REE 153	Rl Estate Law	3	F,W,Sp	none
___ REE 154	Rl Estate Recert	1	TBA	none
___ REE 162	Com Apprl	3	TBA	none
___ REE 163	Resid Apprl	3	TBA	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

REFRIGERATION AND AIR-CONDITIONING

School of Occupational Education
Division of Mechanics
Auto Trades Building Room 206 967-4138

Faculty

Instructors: Robert Bolinder, George Lange

The Program

The Refrigeration/Air Conditioning trade consists of installation, troubleshooting, maintenance, repair of pipe, refrigerant equipment, electrical circuits and controls for cooling and heat.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Cooperative Education credit may be earned in lieu of some of the laboratory classes for completion of graduation requirements. If the laboratory learning objectives are completed on the job, they may be validated through on-site visits by the instructor/coordinator and/or testing. Needs to be approved by the refrigeration instructor.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost for tools and supplies: $855
Estimated cost for books per quarter: $65

CERTIFICATE

(Minimum 53 Credit Hours Required)

Major skill topics

1. Introduction to electricity, motors and controls
2. Basic refrigeration systems
3. Commercial refrigeration and control

The Electricity Basic Certificate will substitute for the first quarter. This is a preparatory program for refrigeration air-conditioning technician. Provides training for residential and commercial/industrial refrigeration/air conditioning work.

If the laboratory learning objectives are completed on the job, they may be validated through on-site visits by the instructor/ coordinator and/or testing.

Suggested First Quarter			Credits
REF	110	Refrigeration Basic Electricity	5
REF	111	Basic Electricity & Heating Lab	5
REF	113	Basic Motor/Controls/Heating	5
REF	147	Math Basics for Refrigeration	5

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ REF	110	Ref Bsc Elec	5	F	none
___ REF	111	Bsc E &H Lab	5	F	none
___ REF	113	Bsc M/C/H Lec	5	F	none
___ REF	120	Fndmtls of Ref	5	W	REF 110 or Basic Elect Certificate
___ REF	121	Bsc Ref Sys L	5	W	REF 110 or Basic Elect Certificate
___ REF	123	Ref Sys	5	W	REF 113 or Basic Elect Certificate
___ REF	130	Ref Wrng Ctrls	5	Sp	REF 120
___ REF	131	Comrcl Srvc L	5	Sp	REF 121
___ REF	133	Auto Ctrl Sys	5	Sp	REF 123
___ REF	147	Math Bscs	5	F	none
___ WLD	105	Related Weld	3	F,W,Sp	none

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

DIPLOMA

(Minimum 116 Credit Hours Required)

(Commercial/Industrial Electricity & Refrigeration/ Air Conditioning)

Major skill topics:

1. Residential wiring
2. Motors and transformers
3. Magnetic and solid state motor control
4. Commercial/Industrial wiring and maintenance
5. Basic refrigeration systems
6. Commercial refrigeration and control

Encompasses the quarters of the Electricity Basic Certificate, Commercial/Industrial Electricity, and Refrigeration Air-Conditioning. Supplies training for residential/ commercial/industrial electrical and refrigeration/air-conditioning work. This training in principles, construction and maintenance, techniques of electricity, conduit wiring, motors, controls, transformers, switch gears and refrigeration/air-conditioning equipment increases the number of job options.

Suggested First Quarter			Credits
REF	110	Refrigeration Basic Electricity	5
REF	111	Basic Electricity & Heating Lab	5
REF	113	Basic Motor/Controls/Heating	5
REF	147	Math Basics for Refrigeration	5

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ELC	110	Pcpls of Tech	4	W	none
___ ELC	113	Bsc Elec	4	F,W,Sp	w/ELC 147 or IND 147
___ ELC	116	Resl Wiring	4	F,W,Sp	w/ELC 117
___ ELC	117	Elect Cds	4	F,W,Sp	w/ELC 116
___ ELC	123	Ad AC Elect	5	W,Sp,Su	ELC 113 w/ELC 148
___ ELC	127	Cds, I/Hards	4	Sp,Su	ELC 117
___ ELC	128	Com. Dev Lab	4	W,Sp,Su	w/ELC 123
___ ELC	133	Mag Cntrl	5	F,Sp,Su	none
___ ELC	139	M & R Cntrls	3	F,Sp,Su	w/ELC 133
___ ELC	140	S-St Cntrl Lab	2	F,Sp,Su	ELC 133
___ ELC	147	Math Bsc Elec	5	F,W,Sp	none
___ ELC	148	Math, AC Elec	5	W,Sp,Su	ELC 147
___ ELC	211	Tech Rprt Dev	4	F,Su	none
___ ELC	213	C/I Prcpls	5	F,Su	ELC 123
___ ELC	214	C/I Wir/Mntce	5	F,Su	ELC 139, 213
___ ELC	221	Indl Eltrn	5	W	ELC 113
___ ELC	226	Prog Logic Cntrl	2	W	ELC 133, 227
___ ELC	227	Electr Crcts	2	W	ELC 113
___ ELC	229	Prog Cntrl Lab	3	W	ELC 140, 227
___ ELC	230	Elect Prjcts Lab	2	W	ELC 113, 221, 226
___ REF	120	Fndmtls of Ref	5	W	REF 110 or Basic Elect Certificate
___ REF	121	Bsc Ref Lab	5	W	REF 111 or Basic Elect Certificate
___ REF	123	Bsc Ref System	5	W	REF 113 or Basic Elect Certificate
___ REF	130	Ref Wrng Ctrls	5	Sp	REF 120
___ REF	131	Comrcl Srv L	5	Sp	REF 121
___ REF	133	Auto Ctrl Sys	5	Sp	REF 123
___ WLD	105	Related Welding	3	F,W,Sp	none

*A=All quarters, F=Fall, W=Winter, Sp=Spring, Su=Summer, TBA=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 139 Credit Hours Required)

Suggested First Quarter			Credits
REF	110	Refrigeration Basic Electricity	5
REF	111	Basic Electricity & Heating Lab	5
REF	113	Basic Motor/Controls/Heating	5
REF	147	Math Basics for Refrigeration	5

Course			Cr	Taught*	Prerequisites
General Requirements (32 credits)					
Core Academic Skills					
___ CL	101	Bsc Cmptr Cpts	3	A	none
___ COM	110	Org Intpl Com	3	A	none
___ ELC	147	Math Bsc Elec	5	F,W,Sp	none
___ ENG	101	English Comp	4	A	pre-test
___ Math (determined by dept)				A	variable
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

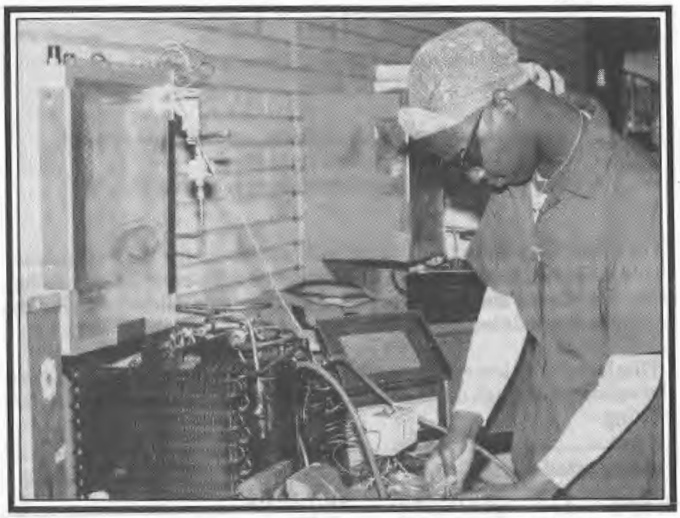
Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (106 credits)

___	ELC	110	Pcpls of Tech	4	W	none
___	ELC	113	Bsc Elec	5	F,W,Sp	w/ELC 147 or IND 147
___	ELC	116	Resl Wiring	4	F,W,Sp	w/ELC 117
___	ELC	117	Elec Cds	4	F,W,Sp	w/ELC 116
___	ELC	123	Ad AC Elect	5	W,Sp,Su	ELC 113 w/ELC 148
___	ELC	127	Cds, I/Hards	4	Sp,Su	ELC 117
___	ELC	128	Com. Dev Lab	4	W,Sp,Su	w/ELC 123
___	ELC	133	Mag Control	5	F,Sp,Su	none
___	ELC	139	M & R Cntrls	3	F,Sp,Su	w/ELC 133
___	ELC	140	S-St Cntrl Lab	2	F,Sp,Su	ELC 133
___	ELC	148	Math, AC Elet	5	W,Sp,Su	ELC 147
___	ELC	211	Tech Rprt Dev	4	F,Su	none
___	ELC	213	C/I Prcpls	5	F,Su	ELC 123
___	ELC	214	C/I Wir/Mntce	5	F,Su	ELC 139, 213
___	ELC	221	Indl Electr	5	W	ELC 113
___	ELC	226	Prog Lgc Cntrl	2	W	ELC 133,227
___	ELC	227	Eletrn Crcts	2	W	ELC 113
___	ELC	229	Prog Cntrl Lab	3	W	ELC 140,227
___	ELC	230	Eletrn Prjcts L	2	W	ELC 113, 221, 226,
___	REF	120	Fndmtls of Ref	5	W	REF 110 or Basic Elect Certificate
___	REF	121	Bsc Ref Lab	5	W	REF 111 or Basic Elect Certificate
___	REF	123	Bsc Ref System	5	W	REF 113 or Basic Elect Certificate
___	REF	130	Ref Wrng Ctrls	5	Sp	REF 120
___	REF	131	Comrcl Srv L	5	Sp	REF 121
___	REF	133	Auto Ctrl Sys	5	Sp	REF 123
___	WLD	105	Related Weld	3	F,W,Sp	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



REFRIGERATION, HEATING & AIR CONDITIONING

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 238 967-4069

Director Fred Rose

The Program

The refrigeration program is designed to provide the student with the basic skills required for work in the service side of the heating and refrigeration industry. The program emphasizes the practical application of the skills learned.

Prerequisites

REFF 050 does not have a prerequisite. Each of the individual courses are designed to build on the knowledge and skills learned in the previous course and must be taken in sequence. Any variation requires instructor approval.

Class Availability

The quarters in which courses are taught are listed here and the course descriptions. The student should check the quarterly class schedule for evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: Approx $130 for all four classes

Suggested First Quarter
REFF 050 Electricity for Refrigeration and Heating Systems 0

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___	REFF	050 Elec Re/Ht Sys	0	F	None
___	REFF	051 Bsc Ref/ Thry/	0	W	REFF 050
___	REFF	052 Adv Ht/Air I	0	Sp	REFF 051
___	REFF	053 Adv Ht/Air II	0	Su	REFF 052

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

RESERVE OFFICER TRAINING CORPS (ROTC)

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 254 967-4201

Director Bill Laney

Both the Air Force and Army ROTC programs are taught by Military Science instructors from the University of Utah.

The School of Continuing Education, in cooperation with the University of Utah, offers classes in both the Air Force and the Army Reserve Officer Training (ROTC) programs.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

AEROSPACE STUDIES (Air Force ROTC)

The Program

Aerospace Studies (Air Force ROTC) trains individuals interested in becoming an officer in the United States Air Force. The first two years offer academic preparation in interdisciplinary areas including communication skills, Air Force history, leadership and management principles and practices, decision-making theory and policy formulation, ethics and valuing. Excellent scholarship opportunities are available.

Preparation Notes

For entry into the two-year program, two academic years must remain at the undergraduate level and applicant must meet the criteria shown below.

Books and Supplies

All necessary ROTC textbooks, uniforms, and other essential materials for the Basic Course are furnished to the student at NO COST. After completing the Basic Course, students who have demonstrated the potential to become an officer and who have met physical/scholastic standards, are eligible to enroll in the Advanced Course.

Enrollment is open to men and women who:

1. Are U.S. citizens or applicants for naturalization. (Aliens may participate in the General Military Course for academic credit only.)
2. Are at least 14 years of age.
3. Are enrolled as full-time students in a course of study leading to an academic degree.

Suggested First Quarter
Courses should be taken in sequential order.

Course	Cr	Taught*	Prerequisites
Major Course Requirements			
___ AIRR 101 A F Today I	1	F	w/AIRR 101 Lab
___ AIRR 101 GMC Lab I	0	F	none
___ AIRR 102 A F Today II	1	W	w/AIRR 102 Lab
___ AIRR 102 GMC Lab II	0	W	none
___ AIRR 103 A F Today III	1	Sp	w/AIRR 103 Lab
___ AIRR 103 GMC Lab III	0	Sp	none
___ AIRR 201 Dev Air Power I	1	F	w/AIRR 201 Lab
___ AIRR 201 GMC Lab IV	0	F	none
___ AIRR 202 Dev Air Pwr II	1	W	w/AIRR 202 Lab
___ AIRR 202 GMC Lab V	0	W	none
___ AIRR 203 DevAir Pwr III	1	Sp	w/ AIRR 203 Lab
___ AIRR 203 GMC LabVI	0	Sp	none

NOTE: Classes and labs are held on the University of Utah campus, where the student participates in training with cadets from other institutions.

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

MILITARY SCIENCE (Army ROTC)

The Program

The Army ROTC program is a program of instruction, which teaches applied leadership and management skills to college students who graduate as officers and serve in the U.S. Army, National Guard, or Army Reserve.

ROTC helps a student develop many of the qualities basic to success in the Army, or in a civilian career. It gives students a valuable opportunity to build for the future by enabling them to pursue a college degree and an officer's commission at the same time.

During the first two years of the program there is no commitment incurred by the student. Only after transferring to a four year institution such as the University of Utah, Weber State College or B.Y.U.. and enrolling in the Advanced Course, is a student required to serve in the Army Reserve.

Two and three year scholarships are available to be used at a four year institution with an Army ROTC program.

Contact the Military Science instructor or an Academic counselor for additional information on the program, including placement credit for military training and Basic camp program for those who decide late that they want to go into ROTC

Books and Supplies

All necessary ROTC textbooks, uniforms, and other essential materials for the Basic Course are furnished to the student at NO COST. After completing the Basic Course, students who have demonstrated the potential to become an officer and who have met physical/scholastic standards, are eligible to enroll in the Advanced Course.

Enrollment is open to men and women who will:

1. Be a U.S. citizen or applicant for naturalization.
2. Be at least 17 years old.

For enrollment in the Advanced Course, the following additional requirements must be met:

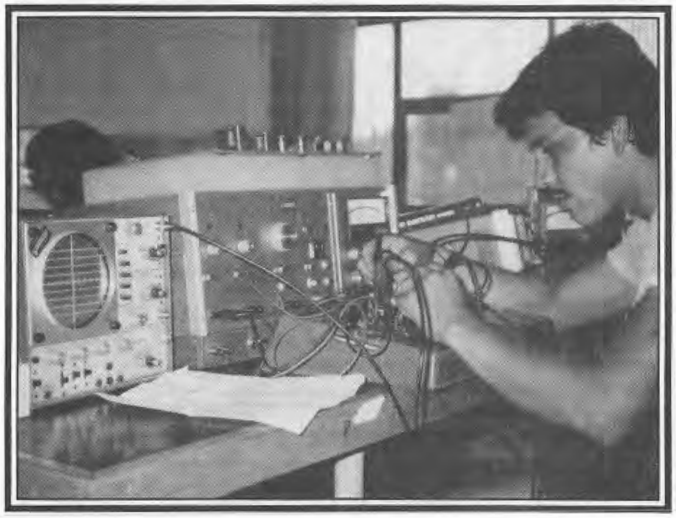
1. Be enrolled as a full-time student and have completed a minimum of 45 credit hours toward graduation.
2. Demonstrate officer potential.
3. Meet medical standards.
4. Qualify in ROTC written and physical aptitude examinations.
5. Be able to complete the Advanced Course prior to age 30.
6. (New) Satisfactorily complete required Military Science I and II courses or equivalents.

Suggested First Quarter
Courses should be taken in sequential order.

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ MLS	101	Army Careers	2	F	none
___ MLS	103	Survival Skills	3	Sp	none
___ MLS	104	First Aid	2	W	none
___ MLS	201	Mlty Map Rdg	3	F	none
___ MLS	204	Leadership	3	Sp	none
___ MLS	206	Military Hist	3	W	none

NOTE: There is a non-credit lab MLS 100 required each quarter. Time and location of lab(s) will be determined during first class session.

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



SKILLS CENTER OPERATIONS

School of Occupational Education
Division of Skills Center Operations
Riverside Campus
1040 West 700 South, 328-5500
Redwood Road Campus,
College Center, Room 230 C 967-4097
(See each program for location)

Faculty

Professors: Keith Bingham, Dorene Jorgensen, Gayle Morawetz, Jeanne Noble; *Associate Professors:* Jeviene Christopulos, Julie Ann Curtis, Shirlene Luke, Paula McBride, Marian Noble, Julie Van Moorhem, Delores Rowley, Sally Williams; *Assistant Professors:* Susan Crittenden, Don Gaillard, Seth Ontiveros *Instructors*: Al Drechsel, Janna Forsgren, Gary Martin, George Miyatake, Ruth Pabst

Mission Statement

The Salt Lake Skills Center provides short-term vocational training and represents the State's commitment to provide quality vocational education to all levels of society in order to meet the needs of people who are educationally, socially, or economically disadvantaged and to those with handicaps, who meet the basic criteria for training.

The goal of the Skills Center is to train students with entry level vocational skills leading to job placement. To that end, programs are designed as hands-on, open-entry/open-exit and students are encouraged to work at their own pace.

Skills Center Programs

Students are admitted to Skills Center classes on a weekly or modular-entry basis. New student orientation is held on Monday and class work begins on Tuesday. Classes are self-paced which allow students to learn at their own speed. Persons wishing to enter a Skills Center program should apply at the Admissions Office Riverside Campus or the Admissions Office at the Redwood Road Campus, College Center, Room 230C, between 8 a.m. and 4:00 p.m. Monday through Friday.

High School and College Credit

Students can earn elective high school credits from their local school district through the Project Cooperation program. College credit is available for certain programs. See Admission Counselors at the Riverside Campus for additional information.

Project Cooperation Program

Project Cooperation offers non-high school graduates, sixteen and a half or older, vocational training that will prepare the student for entry-level jobs. Students must have written permission from the school district vocational coordinator or high school counselor to participate

Student Service Information

The student should refer to the General Information section of this catalog pages 5-16, for complete information on registration, assessment, fees, refunds, financial aid, high school and college credit, attendance policies and all other general information.

ADULT BASIC EDUCATION (READING AND MATH)

(Riverside Campus)

General Information

Classes help students improve their reading and math skills before entering business, vocational or technical programs. Students needing to improve basic reading and math levels for specific training programs, can elect to attend the Adult Basic Education (ABE) reading and math programs and then begin vocational training when the measured math or reading scores reach the determined competency levels.

Computer assisted instruction in both reading and math. Included in the Adult Basic Reading program are the following classes:

- Vocabulary Improvement
- Spelling
- Writing
- Reading and Understanding

The Adult Basic Mathematics classes provides the following:

- Concept Development in Whole Numbers
- Fractions
- Decimals
- Percentages
- Measurements

Other mathematical skills needed for entry into vocational or more advanced math courses.

These classes offer one-on-one assistance. Students begin studies at their own skill levels and learn with computers, tapes, and flash machines. Instruction is individualized to meet the exact needs of each student.

CHILD CARE

(Riverside Campus)

General Information

This six-month program is designed to train a student to care for children (infancy through 12 years) in a child care setting.

Certificate is recognized by the Utah Department of Social Services Office of Licensing, as meeting requirements for a director of a child care center after one year of experience.

Special Requirements

Students in this program should want to work with children and be able to follow directions well. Must not have been convicted of any crimes against children.

Job Information

Cares for children ages one month to twelve years. Plans and implements appropriate activities for the same children, keeps simple records. May have to deal with the public.

Course of Study	Hours
Environment and Heredity	25
Personality Awareness	45
Child Growth and Development	150
Observation and Techniques	68
Guidance and Discipline	56
A Center for Child Caring	56
Job Club	60
Total Hours	**460**

CITIZENSHIP

(Riverside Campus)

Course of Study

This class is for students with limited proficiency in English. The students will learn the basic concepts of U.S. Government, History, and Geography that they will need to pass the U.S. citizenship test. They will also learn how to apply for U.S. citizenship.

COMPUTER LEARNING CENTER

(Riverside Campus)

General Information

The Computer Learning Center provides computer-associated instruction to meet the needs of our vocational training areas. All Skills Center students have the opportunity to come to the computer lab. Computer lab courses also provide opportunities for students who want to "brush-up" certain skills before entering new programs.

Courses Available

Introduction to Computers -- History and development of computers, basics of computer programming, careers using computers, etc.

Basic English Skills -- Grammar, spelling, GED preparation.

Reading Skills -- Basic to advanced skills in reading to understand, critical reading, etc.

Math Skills -- Basic to advanced skills including whole numbers, fractions, algebra, etc.

Spelling -- Improve spelling skills.

Keyboard Skills -- Brush-up or learn keyboarding skills.

GED Practice Tests -- Prepare for the GED tests.

COMPUTER/ OFFICE OCCUPATIONS

(Riverside Campus)

General Information

This 9 - 12 month program enables a student to develop entry-level skills in the computer/office occupations area. Core classes must be completed first. If students have time and meet the qualifications, they may enroll in additional classes.

Special Requirements

Interest in clerical tasks and/or computers. Adequate clerical perception and finger dexterity. Meet reading and math requirements. Ability to follow oral and written instructions. Ability to work on an individualized basis where learning then becomes an active, self-regulating process. **Accounting Clerk:** Interest in figures.

Job Information

Compiles data and operates typewriter in performance of routine clerical duties to maintain business records and reports. Types reports, letters, and other documents. Files, records information, and does other general office tasks. Performs a variety of duties on a personal computer, which include various data entry jobs and basic word processing. **Accounting Clerk:** Performs any combination of ordinary calculating, posting, and verifying duties to obtain primary financial information for use in maintaining accounting records. Performs a variety of accounting clerk duties on a personal computer.

Course of Study	Hours
Core Classes:	
Keyboarding	10
Computer Literacy	15
DOS	15
Life Skills	60
Reverse Ten-key	15
Basic Word Processing	30
Data Entry	30
Typewriting	160
Basic Office Procedures	30
Computer/Office Occupations	
Job Club	60
*English	135
*Business Machines	50
*Bookkeeping	50
* *Hours different for accounting students*	
Accounting Clerk	
English Accounting Clerk	100
Business Machines Accounting Clerk	60
Bookkeeping/Accounting for Accounting Clerk	200
Advanced Classes:	
Lotus	30
Advanced Word Processing	80
Computer Assisted Accounting	25
Advanced Office Procedures	40
Medical Terminology	30
Computer/Office Occupations	
Core Classes	660
Time for Advanced Classes	180
Total Hours	**840**
Accounting	
Core Classes	785
Time for Advanced Classes	55
Total Hours	**840**

Lotus, Advanced Word Processing, Advanced Office Procedures, and Medical Terminology are the recommended advanced classes for COO students. Lotus and CAA are the recommended advanced classes for COO students who are taking accounting.

(Tooele, Utah)

General Information

This program enables a student to develop entry-level skills in the computer/office occupations area.

Special Requirements

Interest in clerical tasks and/or computers. Above average manual dexterity. Meet reading and math requirements. **Accounting Clerk:** Interest in figures.

General Information

This program enables a student to develop entry-level skills in the computer/office occupations area.

Job Information

Compiles data and operates typewriter in performance of routine clerical duties to maintain business records and reports. Types reports, letters, and other documents. Files, records information, and does other general office tasks. Performs a variety of duties on a personal computer that includes various data entry jobs and basic word processing.

Course of Study	Hours
Core Classes:	
Keyboarding	10
Computer Literacy	15
DOS	15
Life Skills	45
English*	200
Business Machines	40
	OR
Business Machines (for Accounting Clerk)	65
Reverse Ten-Key	15
Basic Word Processing	30
Data Entry	20
Bookkeeping	40
Bookkeeping (for Accounting Clerk)	240
Typewriting*	245
Office Procedures	20
Job Club	60
Additional Classes:	
Lotus 1,2,3	30
Word Processing	80
Computer Assisted Accounting	40
Machine Transcription	40
Advanced Office Procedures	30

* Required hours for typing production and English are fewer for those student working accounting.

COMPUTER PROGRAMMING TRAINING FOR PERSONS WITH SEVERE DISABILITIES

(Riverside Campus)

General Information

Class work is designed so that students work both individually and in teams. A professional approach is required and maintained. Lectures introduce new concepts with the majority of class work involving hands-on assignments. Evaluation is a daily procedure through observation and quizzes. At the end of each trimester, a formal evaluation interview is conducted by staff and the Business Advisory Council.

Schedule

8 a.m. - 12:30 p.m. (the first four to six weeks), 8 a.m. - 3 p.m. (through the second trimester), then 8 a.m. - 4 p.m. through completion.

Training Length

The Computer Programming class has a training length of ten months plus an 8-week internship at a local data processing business. The curriculum is designed to train individuals to become entry-level business applications programmers. Curriculum is continuously updated to meet the needs of local employers and to develop skills and awareness in a rapidly developing field.

Additional Information

A Business Advisory Council (BAC) functions as advisor to the Program Coordinator and faculty. The Council consists of professional

people from data processing and personnel departments of local businesses who contribute their professional expertise through subcommittees. These BAC subcommittees are directly involved in student selection, curriculum, evaluation, interviewing applicants for admission, interviewing students each trimester for evaluation, internship, and placement.

This program is funded by Projects With Industry monies from the Rehabilitation Services Administration.

Starting Salary

Entry-level programmers in the Salt Lake Valley average $14,000 to $16,000 per year.

Eligibility Criteria

Applicant should contact Jack Hesleph, Program Coordinator, Salt Lake Skills Center - 328-5511.

ELECTRONIC ASSEMBLY

(Riverside Campus)

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. ***The hours completed do not apply toward other college programs.***

General Information

The student learns electronic manufacturing techniques in soldering, wiring, circuit board assembly and electromechanical assembly. Student will learn to use a microscope for miniature work. Schematic diagrams, symbols, and various types of operation sheets and tables are used as instructional aids in order to teach the student to use various types of documentation.

Special Requirements

Good finger dexterity and good color perception.

Job Information

The student working as an electronic assembler will assemble electronic equipment, following blueprints, wiring diagrams and schematic. Student will connect lead wires of components such as resistors, capacitors, transistors and diodes to specified terminals using a soldering iron. Also route and fasten jumper wires and cables to specified contact points, following wiring diagrams and wire lists. The assembler may also test circuits for shorts or open wires using a continuity meter. Student may solder precut wires to multiple pin connectors and lace wires into cable assemblies.

Course of Study	Hours
Science of Soldering	20
Hand Tools	6
Soldering (advanced)	36
Component Mounting (circuit board)	8
Component Identification	12
Schematic Diagrams	12
Color Code	8
Microscope	12
Mechanical Assembly	6
Job Club	60
Total Hours	**180**

ELECTRONIC MECHANICS

(Riverside Campus)

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. ***The hours completed do not apply toward other college programs.***

General Information

This program enables a student to develop entry-level skills in the electronics field. Core classes of Electronic Assembly and Basic Electronic Theory must be successfully completed prior to declaring an emphasis in Electronic Test Technician, Micro Computer Repair or Consumer Electronics. A student with previous electronic theory background may take the challenge test for prerequisite courses.

Special Requirements

Good manual and finger dexterity and color perception. Basic reading and math skills.

Job Information

Electronic Assembly

(Approximately 6 Weeks) The student working as an electronic assembler will assemble electronic equipment, follow blueprints, wire diagrams and schematics. The student will connect lead wire of components such as resistors, capacitors, transistors and diodes to specified terminals using a soldering iron. Also route and fasten jumper wires and cables to specified contact points, following wiring diagrams and wire lists. The assembler may also test circuits for shorts or open wires using a continuity meter. The student may solder precut wires to multiple pin connectors and lace wires into cable assemblies.

Courses	Hours
Science of Soldering	20
Hand Tools	6
Soldering (Advanced)	36
Component Mounting (Circuit Board)	8
Component Identification	12
Schematic Diagrams	12
Color Code	8
Microscope	12
Mechanical Assembly	6
Job Club	
Total Hours	**180**

Basic Electronic Theory

(Approximately 5 - 6 Months) A student can use the knowledge gained in this course to perform various entry level electronics tasks. These include installation of audio components, security and alarm systems, repair of copy machines and appliances.

Courses	Hours
Electronics Assembly	120
AC and DC Basic Theory	55
RLC Circuits	60
Motors, Generators, and Transformers	70
Solid State Amplifiers	65
Basic Trouble Shooting	50
Job Club	60
Total Hours	**480**

Electronic Test Technician

(Approximately 6 Months) The student is trained to perform a variety of electronic, mechanical and electro-mechanical tests using a full range of electronic test equipment. The student learns to test electronic systems, subassemblies, and parts to insure unit functions according to specifications or to determine the cause of unit failure.

Courses	Hours
Prerequisite: Basic Electronic Theory or Equivalent Electronic Theory	**420**
Solid State Devices	95
Resonance and Oscillators	65
Computer Math	70
Gates and Computer Components	40
Micro Processor Programming	75
Job Club	60
Total Hours	**825**

Micro Computer Repair

(Approximately 9 months) The student is trained to analyze and verify digital circuit operations. The student will have sufficient background

in electronics theory, digital electronics and test procedures as well as the use of both analog and digital test equipment to perform tests and repair most types of microprocessor operated equipment.

Courses	Hours
Prerequisite: Basic Electronic Theory or Equivalent Electronic Theory	420
Number Systems	85
Logic Symbology	90
Computer Components	210
Micro Processors	275
Job Club	60
Total Hours	**1,140**

ENGLISH AS A SECOND LANGUAGE

(Redwood Road Campus)
Technology Building Learning Center Room 108 967-4172
(or) Business Building Room 230 967-4327

(Riverside Campus)
1040 West 700 South 328-5590 or 967-4313

COLLEGE PREP ESL

Faculty

Assistant Professor: Dean Huber; *ESL Counselor:* John Wiemer - *CC 230J 967-4077*

Program

This program is for students who are not native speakers of English. The purpose of the program is to prepare the students to successfully complete other programs at the college.

Objectives include:

1. A review of the English verb tense system in order to practice classroom skills, improve understanding of written and spoken English, and communicate more effectively when speaking or writing English.
2. Practice of listening comprehension skills so the students can successfully understand an American teacher in a technical class.
3. Development of English speaking skills so the students can participate in classroom discussions, ask questions when they need to, and successfully communicate what they know.
4. Development of college-level textbook reading skills.
5. Development of basic writing skills in preparation for the college-level composition class.

Preparation

Students who wish to enroll in the ESL classes must demonstrate their proficiency in English by scoring within an acceptable range on either the (CALT) Computer Adaptive Language Test or the TOEFL (Test of English as a Foreign Language). Admission in the ESL program requires a score between 55-70 on the CALT administered by the Testing and Assessment Center at Salt Lake Community College or between 70 and 82 on a Michigan Test from another school, or a TOEFL score between 450 and 500. Students may enter a technical/vocational program by scoring above these ranges on the CALT and TOEFL or after fulfilling the entry level requirements for that program. Generally one quarter of ESL studies is sufficient to prepare the students to enter other programs.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Approximate book and supply cost: $50 per quarter

Course			Cr	Taught*	Prerequisites
ESL	101	Grammar, Listening, Speaking for ESL	7	A	pre-test
ESL	102	Writing for ESL	4	A	pre-test
ESL	103	Reading for ESL	4	A	pre-test

A=All quarters, *F*=Fall, W=Winter, *Sp*=Spring, *Su*=Summer *TBA*=variable

BEGINNING AND INTERMEDIATE ESL

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. ***The hours completed do not apply toward other college programs***

Faculty

Instructor: Mary Mellott

DAY CLASSES (Riverside Campus)

Courses

Beginning ESL
This is a more traditional beginning ESL course. Topics covered include: banking, home/apartment repairs, dealing with landlords, bill paying, etc. Emphasis is on everyday living skills and language skills involved in getting/keeping a job.

Advanced Beginning ESL
Students work on skills necessary to deal successfully with many of their day-to-day communication needs. They also begin to discuss more abstract concerns such as traditions, holidays, customs, etc. Emphasis remains on job getting/keeping skills as well as appropriate social behavior.

Intermediate ESL
This course is designed as a transition from survival skills to a more vocational/academic orientation

All levels work on improving reading comprehension, writing, listening, and speaking skills. U.S. History, Geography, and Government are also incorporated in the curriculum of each level of social behavior.

EVENING CLASSES (Redwood Road Campus)

Courses

Beginning ESL
This is a more traditional beginning ESL course. Topics covered include: banking, home/apartment repairs, dealing with landlords, bill paying, etc. Emphasis on survival skills and language skills involved in getting/keeping a job.

Advanced Beginning ESL
Students work on skills necessary to deal successfully with many of their day-to-day communication needs. They also begin to discuss more abstract concerns such as traditions, holidays, customs, etc. Emphasis remains on job getting/keeping skills as well as appropriate social behavior.

JOB CLUB

(Riverside Campus)

General Information

The purpose of Job Club is to give two weeks of intensive, individualized job-seeking skills to students who have completed classroom hours and includes interviewing skills, resume writing, master applications, job resources, and telephone techniques.

In addition, professionalism, interpersonal communication skills, time management, budgeting, and marketing techniques will be covered. Students are in class 8:30 a.m. - 3:00 p.m. each day for two weeks. Individualized job development and job placement occur after the student completes Job Club.

MEDICAL RECORDS SPECIALIST

(Riverside Campus)

Faculty

Instructor: Delores Rowley

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. ***The hours completed do not apply toward other college programs***

General Information

The course consists of clerical training at the Skills Center in data entry, life skills, typing skills, medical office procedures, medical terminology, and basic wordprocessing. At the end of classroom training is a six-week practicum at a medical facility in the medical records department for 16 hours per week to complete the requirements for graduation. Externship sites will be arranged by the faculty.

Special Requirements

15 WPM typing speed, ability to work well with large numbers of people in a high-paced work setting. Ability to follow oral and written instructions. Ability to work on an individualized basis where learning then becomes an active, self-regulating process. Interest and aptitude in medical field and a desire to maintain personal appearance appropriate to occupation. Commitment on the part of the student to an ongoing development of his/her professional growth.

Job Information

The successful student will be prepared to work in hospital offices, 24 hour clinic offices, or doctors' offices.

Courses	Hours
Data Entry	30
Life Skills	40
English	135
Typing Skills	160
Medical Office Procedures	75
Production Typing	30
Medical Terminology	40
Basic Bookkeeping	50
Basic Wordprocessing (WordPerfect 5.0)	30
Supervised 6 week externship at medical facility	125
Job Club	60
Total Hours	**775**

NURSE'S AIDE

(Redwood Road Campus)

Faculty

Instructor: Albert Ybarra

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. ***The hours completed do not apply toward other college programs.***

General Information

A student interested in this program must have a genuine concern for people and be able to assist those who are ill. On-site hospital program. Those who work in this area may work weekends and shift work.

Special Requirements

Like to work in a responsible "caregiver" position. General reading and math skills.

Job Information

Students who complete training will work under the direction of nursing and medical staff in responding to patients' needs. Students will learn to keep records, take temperatures, pulse and respiration rates, and record food and liquid intake and output as directed. Nurse Assistant may apply compresses and hot water bottles, change bed linens, answer phones, run errands, dust and clean rooms, take patients to therapy areas, bathe, dress and undress patients, and serve and collect food trays.

Courses	Hours
Medical Terminology	50
Vocational Standards	5
Interpersonal Relationships	30
Hospital and Health Team	10
Medical and Surgical Asepsis	50
Introduction Anatomy and Physiology	120
Vital Signs and Physical Assessment	15
General Patient Care	60
Special Care Nursing	60
Application of Clinical Situation	140
Job Club	60
Total Hours	**600**

PRINTING

(Redwood Road Campus)

Faculty

Audrey Nelson

The Program

The student learns the newest techniques in the broad field of Graphics Production including a full understanding of graphic design and layout, desktop publishing, stripping, plate making, camera work, press operation, and bindery. In the newest aspect of the printing industry, Desk Top Publishing, the student learns a variety of desk top publishing software including PageMaker, X-Press, Freehand, and Image Studio. The student learns both the new ways of scanning and computer editing of photographs as well as the traditional use of camera in halftone work. The course includes beginning, intermediate and advanced printing including an internship for SLCC press.

Although students can be admitted on an open entry weekly basis, students are encouraged to follow the quarter schedule. Classes are self-paced which allow the students to learn at their own pace. Individuals already working in the field are encouraged to enroll and upgrade their skills in this rapidly changing field.

All students should complete the General Printing course work and choose a minimum of one additional Emphasis.

Special Requirements

Good vision and attention to detail. Ability to handle high levels of stress.

Job Information

The student will be able to work with the latest hardware and software in desk top publishing including word processing programs. In addition, the student will be able to work with camera, shooting both line and halftone negatives, do basic and advance stripping and plate making, and work with quick printing and commercial printing.

Prerequisites

It is the student's responsibility to examine each course description for details prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply cost: $75 -$100

DESKTOP PUBLISHING PRODUCTION

(Minimum 51 Credit Hours Required)

Course				Cr	Taught*	Prerequisites
Major Course Requirements						
Required (48 credits)						
___	MGT	110	Sm Bus Mgt	3	A	none
___	PRT	102	Layout/Paste-up	3	W,Su	none
___	PRT	103	Desktop Pub D	3	F,Sp	none
___	PRT	105	Beg Dsktp Pub	5	A	none
___	PRT	106	Beg XPress	3	F,Sp	none
___	PRT	108	Microsoft Word	3	W,Su	OIS 107 or equiv
___	PRT	113	MacDraw/Paint	3	W,Su	OIS 107 or equiv
___	PRT	114	Scanner Apl	3	F,Sp	PRT 105
___	PRT	128	SLCC Intern	10	TBA	permission
___	PRT	135	Adv PageMaker	3	F,Sp	PRT 104, 105
___	PRT	137	Adv XPress	3	W,Su	PRT 106
Option 1						
___	OIS	225	Beg Dsktp Pub	5	W,Sp,Su	OIS 112, 140, 212 or permission
___	PRT	110	Adv Freehand	3	F,Sp	PRT 105 or PRT 109
Option 2						
___	PRT	111	Beg Illustrator	3	W,Su	PRT 105
___	PRT	112	Adv Illustrator	3	F,Sp	PRT 111
Electives (3-5 credits)						
___	BUS	101	Bus. English	3	A	none
___	BUS	115	Bus. Writing	3	A	BUS 101, ENG 101
___	COM	150	Mass Com	5	A	none
___	PRT	115	Multi Media	3	W,Su	PRT 105
___	PRT	116	Adv Imag Tech	3	W,Su	PRT 105

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

OFFICE PRESSROOM PRODUCTION

(Minimum 54 Credit Hours Required)

Course				Cr	Taught*	Prerequisites
Major Course Requirements						
Required (51 credits)						
___	MGT	110	Sm Bus Mgt	3	A	none
___	PRT	101	Gen Printing	7	A	none
___	PRT	104	Beg PageMaker	3	A	OIS 107 or equiv
___	PRT	119	Beg Strp Plate	5	W,Su	PRT 101
___	PRT	121	Beg Printing	5	W,Su	PRT 101
___	PRT	122	Adv Quick Prtg	5	F,Sp	PRT 121
___	PRT	123	Beg Cmrcl Prtg	5	W,Su	PRT 101
___	PRT	125	Int Cmrcl Prtg	5	F,Sp	PRT 123
___	PRT	127	Bind/Finishing	3	F,Sp	none
___	PRT	128	SLCC Intern	10	TBA	permission
___	**Electives** (take 3-5 credits)					
	BUS	101	Bus. English	3	A	none
	BUS	115	Bus. Writing	3	A	BUS 101, ENG 101
	COM	150	Mass Com	3	A	none
	PRT	126	Adv Cmcrl Prtg	5	W,Su	PRT 125

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

PRE - PRESS

Minimum 52 Credit Hours Required)

Course				Cr	Taught*	Prerequisites
Major Course Requirements						
Required (50 credits)						
___	MGT	110	Sm Bus Mgt	3	A	none
___	PRT	101	Gen Printing	7	A	none
___	PRT	104	Beg PageMaker	3	A	OIS 107 or equiv
___	PRT	117	Beg Camera	5	W,Su	PRT101
___	PRT	118	Adv Camera	5	F,Sp	PRT 117
___	PRT	119	Beg Strp Plate	5	W,Su	PRT 101
___	PRT	120	Adv Strp Plate	5	F,Sp	PRT 119
___	PRT	127	Bind/Finishing	3	F,Sp	none
___	PRT	128	Press Intern	10	TBA	permission

PRODUCTION MACHINIST

(Redwood Road Campus)

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. ***The hours completed do not apply toward other college programs.***

General Information

Students are required to move, maintain, repair, program, set-up, and operate metal working equipment. They are required to perform additional duties such as reading blueprints, job orders and perform set-up operations. Machinists need a good background in mathematics, science and drawing as well as a good mechanical aptitude.

Special Requirements

Basic math, manual dexterity, good eyesight and good problem-solving skills.

Job Information

The outlook for the next ten years is good for both job openings and wages for men and women. Entry-level salaries start around $4.50 per hour and up.

Courses	Hours	Courses	Hours
Safety	8	All Measurements	50
Metals	20	Hand Tools	30
Welding	40	Basic CNC	25
Lathes	250	Math	50
Mills	100	Reg & Surface Grinding	10
Drill Presses	40	Job Club	60
Sawing	20		
Total Hours		**703**	

PROFESSIONAL TRUCK DRIVING

(Riverside Campus) 328-5500

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. ***The hours completed do not apply toward other college programs.***

Faculty

Instructors: Al Drechsel, Gary Martin, George Miyatake.

General Information

The program consists of instruction in the history and growth of the transportation industry, driver qualifications, safe driving techniques, state and federal laws governing transportation, preventive maintenance, trouble shooting, fire procedures, record keeping, and filing accident reports.

Emphasis is placed on actual experience in field driving. Equipment used consists of semi-trailers and over-the-road diesel tractors and trailers.

Average Length : 7 Weeks/280 Hours
56 Hours Classroom
56 Hours Lab
168 Hours Driving (56 behind the wheel)
180 Hours Total
(60 hours Job Club as needed)

Cost: $1,400

Capacity: Three (3) students per class maximum

Schedule: 7:30 a.m. - $:00 p.m. Monday - Friday
40 Hours per week (may vary with long run schedules)

Special Requirements

1. Commercial Drivers License Permit
   - ° Utah State Requirements for Commercial Driver's License Permit
   - ° D.O.T. Physical ($24 fee)
   - ° Social Security Card. If none, W-4 or Tax Return
   - ° Submit License for Written Test
   - ° $30 Cost plus $5 per Endorsement for written portion only

   *Balance of $50.00 due upon application for Road Test

2. The student must be willing and able to work any shift required by a prospective employer and pass Drug Screen.

3. A copy of Motor Vehicle driving record is required ($3). There can be no DUI's or major offenses on the record. The majority of employers require drivers who are bondable.

4. Basic reading and math skills, along with eye/hand/foot coordination.

Job Information

Students who complete the program will be able to drive gasoline or diesel-powered or tractor-trailer combinations (long distance or in-state).

Supplies

$1,400

COMMERCIAL DRIVERS LICENSE PREPARATORY CLASS FOR "CLASS A" ONLY
5 days at 4 hrs/day. Tuition is $50, which doesn't include Utah Motor Vehicle Registration written test fee of $30.

Enrollment is restricted to students intending to enroll in the Skills Center Professional Driving Program. Others should contact SLCC Continuing Education to enroll in a CDL only program. The standard application and assessment fees ($25.00) are required in anticipation of enrolling in the Professional Driving Program.

Air Brakes
Combinations
General Knowledge

PROFESSIONAL DRIVING COURSE OF STUDY

Intro to Professional Driving
Regulations & CDL
History of Industry
Attitude

Intro to Vehicle and Trailer
Parts & function
Pre-trip and Post-trip Inspection
Safety Equipment
Coupling and Uncoupling

Control Systems
Function and Operation of Controls, e.g., gear shift, tachometer, instruments, etc.
Air Brakes Parts and Use
Hydraulic Brakes

Basic Control
Starting and Stopping
Backing
Turning
Parking
Vehicle in Motion

Safety
Visual Search
Communication
Speed and Space Management
Steering and Braking Practices
Recognizing Hazards

Extreme Driving Conditions
Hot and Cold Weather
Stormy Conditions, Chains
Mountain Terrain
Skid Control and Recovery

Job Club
If not employed at completion of program, Job Club will assist with job placement.

WELDING

(Redwood Campus)

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives. ***The hours completed do not apply toward other college programs***

Special Requirements

Good eyesight, good eye-hand coordination, and basic reading and math skills.

General Information

This program enables a student to develop entry-level skills in the steel fabricating and welding industries. The student will have the choice of concentrating on either welding or fabrication layout or a combination of both. Safety and good work habits are emphasized.

Job Information

Includes occupations primarily concerned with joining, surfacing or otherwise fabrication or repairing structures or parts of steel or other metals, applying the following welding or cutting processes: arc, gas, and wire feed machines.

Courses *(Non-Credit)*		Hours
I. Oxyacetylene Welding and Cutting		200
All Positions	Cutting	
Braze Welds	Pipe Welds	
II. Arc Welding		730
All Positions	GMAW -FCAW-GTAW	
Use of Arc Air Torch	Practice Pipe Welding*	
ASME Certification		
III. Blueprint Reading/Layout		150
Specification/Dimensions	Fitting Up-Welding from Prints	
Welding Symbols		
IV. Job Club		60
Total Hours		**1140**

* Additional hours of practice to achieve a higher skills level in the above will be highly beneficial.

SMALL EQUIPMENT/VEHICLE TECHNICIAN

School of Occupational Education
Division of Mechanics
Auto Trades Building Room 206 967-4138

Faculty

Assistant Professor: Cecil Sellers

The Program

This program prepares specialists in the areas of small gasoline engines, outboard boat motors, motorcycles, snowmobiles, outdoor power equipment (lawn and garden equipment, chain saws, snow blowers, etc.), and other similar equipment. The technician must understand the electrical and mechanical components of this equipment.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program

Special Requirements

Good physical condition and above average eye-hand coordination. Some heavy lifting is required.

Job Information

Students will receive placement assistance to jobs which relate to the competencies which he/she has completed.

Elective Options

If a student is employed in a job involving Small Equipment/Vehicle Repair, it is possible to earn some laboratory credit through Cooperative Education. With prior approval of Prof. Sellers and the faculty CO-OP coordinator for the Division of Mechanics the student would register for the regular laboratory course. (A "Section 80" designation identifies that credit is being earned through CO-OP.)

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost for tools and supplies: $520
Estimated cost for books per quarter: $40

CERTIFICATE

(Minimum 58 Credit Hours Required)

Suggested First Quarter			Credits
IND	147	Math for Industry	5
SEVT	110	2 C & 4C Engine Repair	7
SEVT	111	2C & 4C Engine Theory	5

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ COM	110	Org Intpl Com	3	A	none
___ IND	108	Indl Electr	2	F,W,Sp	none
___ IND	147	Math for Ind	5	F,W,Sp	permission
___ LE	122	Career Dev	3	A	none
___ PTM	110	Prcpls of Tech I	4	TBA	none
___ SEVT	110	2 & 4C Eng	7	F	w/SEVT 111
___ SEVT	111	2 & 4C Eng	5	F	w/SEVT 110
___ SEVT	120	Sno & Moto Lab	7	W	SEVT 110,111 w/SEVT 121
___ SEVT	121	Sno & Moto Thry	5	W	w/SEVT 120
___ SEVT	130	Outbd Mtr Drv	7	Sp	SEVT 110,111 SEVT 120, 121 w/SEVT 131
___ SEVT	131	Outbd Mtr Drv	5	Sp	w/SEVT 130
___ SEVT	192	Spclty Training	5-12	A	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

SMALL ENGINE REPAIR

Suggested First Quarter

This is an open entry/open exit program. Students may enroll anytime during the first five weeks of a quarter and complete when they meet the educational objectives. *The hours completed do not apply toward other college programs.*

Special Requirements

Good physical condition and above average eye/hand coordination. Some heavy lifting is required. Ability to lift 30-50 pounds may be required.

Job Information

Repair and maintain small gasoline engines such as outboard motors, motorcycles, snowmobiles, and outdoor power equipment. The technician must understand the electrical and mechanical components of this equipment, use hand tools and measuring devices.

Courses	Hours
Preventive Maintenance Lab	40
Preventive Maintenance Theory	40
Basic Small Engines Lab	250
Basic Small Engines Theory	160
2-Cycle Engines	150
Outboard Engines	155
Job Club	60
Total Hours	**855**

FLEXIBLE ENROLLMENT PROGRAM

The Flexible Enrollment Program is offered in addition to the full quarter requirements for the diploma or degree. The modules are competency based. Please contact Julie Hoelle at 967-4097 or the Department Coordinator, Construction Trades Building, Room 065.

SOCIAL SCIENCE

School of Humanities and Sciences
Division of Health & Human Services
Business Building Room 330F 967-4384

Faculty

Professor: Nancy M. Elbert; *Associate Professors:* Spencer Adams, Larry Christensen; *Assistant Professors:* John Mc Cormick, Grant Smart, Drusilla Glascow

The Program

The Social Science department offers courses in psychology, sociology, history, economics and political science. Students may register for classes in the department as related classes in their major fields of study, for general interest and personal improvement, and as required and elective classes for the AS and AA degrees. All courses within the department are transferable to other colleges and universities within the state system of higher education.

Students who are interested in transferring to a four-year institution are encouraged to register for a wide range of social science courses since they form a major part of the base of most degrees in psychology, social work, education, pre-law and other professional areas.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. With prior approval, a student working in a job related to Social Science may earn up to six hours of Cooperative Education credit. See POLI 200, PSY 200, or SOC 200 course descriptions for more details.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Cost for supplies and texts are comparable with other general education classes at approximately $30 per text.

DEPARTMENTAL OFFERINGS

(Courses administered by the Social Science Department)

Course			Cr	Taught*	Prerequisites
ECN	105	Svy Ecn/SSO	5	A	none
HIS	120	Early US Hist	5	F,W	none
HIS	121	US His/Civ War	5	W,Sp	none
HIS	170	American Civil	5	A	none
HIS	299	Utah History	5	A	none
POLI	101	Intro Pol Sci	3	F	none
POLI	102	Grop Dec Mkg	3	F,W,Sp	none
POLI	105	Leadership	1-2	F,W,Sp	permission
POLI	106	Leadership cont	1-2	F,W,Sp	permission
POLI	107	Leadership cont	1-2	F,W,Sp	permission
POLI	110	Am Ntl Gov	5	A	none
POLI	111	State/Local Gov	5	Sp	none
POLI	200	Pol Sci CO-OP	3-6	A	permission
POLI	216	Politics in Act	3	TBA	POLI 110, 111
POLI	220	Intro Comp Pol	5	Sp	POLI 110
PSY	101	Gen Psychology	5	A	none
PSY	140	Prsnl Grth/Dev	3	F,W,SP	none
PSY	150	Hmn Grth /Dev	5	A	none
PSY	200	Psych CO-OP	3-6	A	permission
SOC	101	Intro to Soc	5	A	none
SOC	138	Soc Mrg /Fmly	4	W	SOC 101 or equiv
SOC	160	Crt Soc Issues	5	Sp	SOC 101 or equiv
SOC	200	Soc CO-OP	3-6	A	permission
SOC	228	Alcohol/Drug	3	A	none
SS	125	Spec Std in Soc	1-2	TBA	permission

A=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

SURGICAL TECHNOLOGY

School of Humanities and Sciences
Division of Health and Human Services
Administration Building Room 139 967-4517

Faculty

Professor: Bonita Robertson; *Assistant Professor:* Klea Mordaunt

The Program

The Surgical Technologist, under the direct supervision of the registered nurse, functions as a member of the surgical team by assisting with surgical procedures and providing the surgeon with instruments, sutures, sponges and other equipment necessary to accomplish the procedures. Graduates can expect to earn approximately $6.00 to $7.00 per hour starting salary.

Preparation Note

Men and women entering this field should be in good mental and physical health. The job requires visual and aural acuity, eye-hand coordination and finger dexterity. Surgical Technicians are required to stand for long periods of times.

Minimum Application Requirements

1. Application to SLCC
2. ASSET test scores
   Reading Comprehension 21
   Language Usage 41
3. High School or College GPA of 2.0 or higher.
4. Separate application to Health Science Department.
5. Two reference letters from employers or teachers.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program. The Life Science Department requires Biology 101 proficiency as a prerequisite to subsequent biology courses. Students are encouraged to take Biology classes prior to acceptance into the program.

Registration in the Surgical Technology Program requires a special application procedure. ASSET Test must be completed and application made prior to the second Friday in May. Enrollment is determined by available instructional areas in local health care facilities. The initial contact and application is made through the Salt Lake Community College Admissions Office. The final application process and selection of students is completed through the Health Science department.

To retain a position in the program, students must complete their planned curriculum with a "C" grade or better in each class including general education classes. General Education courses may be taken prior to enrollment into the program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

The approximate total cost of books and supplies is: $160

CERTIFICATE

(Minimum 52 Credit Hours Required)

Suggested First Quarter

See program advisor for scheduled sequence.

Course	Cr	Taught*	Prerequisites
Core Academic Skills			
___ Minimum level Asset Test scores: Reading Comprehension - 21 Language Usage - 45			
Major Course Requirements			
___ BIOL 205 Anatomy	5	A	pre-test, w/BIOL 206
___ BIOL 206 Anatomy Lab	0	A	w/BIOL 205
___ BIOL 214 Microbiology	5	A	pre-test, w/BIOL 215
___ BIOL 215 Microbio Lab	0	A	w/BIOL 214
___ COM 110 Org Intpl Com	3	A	none
___ PSY 140 Prsnl Grth / Dev	3	F,W,Sp	none
___ SURG 100 Med/Surg Term	1	F	accept in program
___ SURG 101 Intro Surg Thry	6	F	accept in program
___ SURG 112 Surg Theory I	6	W	SURG 101
___ SURG 113 OR Clinical I	8	W	SURG 101
___ SURG 122 Surg Theory II	7	Sp	SURG 112
___ SURG 123 OR Clinical II	8	Sp	SURG 113

☞ Take SURG 101 with Biology courses

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

SURVEYING

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 238 967-4201

Director Fred Rose

The Program

The surveying program serves three distinct purposes:

(1) To give students with little or no experience in the field the skills needed for employment as a surveyor;
(2) To give those already working in the profession additional knowledge needed to prepare for their professional examinations; and,
(3) To give licensed professionals opportunities for upgrade training on new issues in surveying.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

A combination of in-class instruction and actual on-the-job experience for college credit and pay, constitutes the cooperative education concept. It is a highly successful learning strategy that provides relevant training in specific occupations.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies
Estimated book and supply cost: $400 for all core and elective classes

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 105 Credit Hours Required)

Suggested First Quarter			Credits
ENG	101	English Composition	4
MTH	101	Intermediate Algebra	5
SVTT	101	Introduction to Surveying	2

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ MTH	101	Inter Algebra	5	A	pre-test
___ PSY	101	Gen Psych**	5	A	none
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 7 hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — ** fills Social Science area

(See pages 10 & 11for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements

___ CD	113	Drftg Fdmts	5	A	none
___ CD	219	Civil Drafting	5	Sp	CD 113, CD 140
___ CL	130	BASIC	3	A	MTH 101
___ ENG	130	Tech Writing	4	A	ENG 101
___ MTH	105	College Algebra	5	A	MTH 101
___ MTH	106	Plane Trig	5	A	MTH 105
___ SVTT	101	Intro to Srvyg	2	TBA	none
___ SVTT	102	PL &Srvy Sys	3	TBA	SVTT 101
___ SVTT	103	Srvyg Fld Tech	5	TBA	none
___ SVTT	200	SrvyngCO-OP	8	A	permission
___ SVTT	201	Srvyng Math I	4	TBA	MTH 101,105,106
___ SVTT	202	Srvyng Math II	4	TBA	SVTT 201
___ SVTT	203	Srvyng Math III	4	TBA	SVTT 202
___ SVTT	204	Control Surveys	4	TBA	SVTT 201
___ SVTT	205	Legal Descns	4	TBA	SVTT 102,201
___ SVTT	206	Ethics &Liab	3	TBA	none
___ SVTT	207	Lnd Bndry Law	5	TBA	SVTT 205
___ **Elective Classes** (take 8 credits)					
SVTT	210	Lnd Dvlpmnt	4	TBA	SVTT 20
SVTT	211	Photogrammetry	4	TBA	SVTT 201
SVTT	212	Lnd Info Sys	4	TBA	none
SVTT	213	Public Records	4	TBA	SVTT 205, 207
SVTT	214	Srvy Instrumntn	4	TBA	SVTT 103
SVTT	215	Rng a Srvy Bus	4	TBA	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

THEATER ARTS

School of Continuing & Community Education

Division of Continuing Education

Construction Trades Building Room 258 967-4106

Director Barbara Pomeranz

The Program

The Theater Arts program offers introductory courses for personal, as well as professional development. Students can develop an appreciation of theatrical arts, musical theater, and film as well as participate in the artistic process. Students will have the opportunity to participate in on-campus productions and may work towards an Associate of Arts Degree in Theater Arts in the future.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost of books and supplies: $200

Suggested First Quarter

Courses may be taken in any order as long as prerequisite requirements are met.

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ THE	101	Svy Theatre	5	A	none
___ THEE	105	Intro to Film	4	A	none
___ THEE	111	Basic Act I	3	A	none
___ THEE	112	Basic Act II	3	A	THEE 111, perm
___ THEE	114	Basic Act III	3	TBA	THEE 112
___ THEE	125	Spc Prj Thtr	1-4	A	permission
___ THEE	214	Critical Film	4	TBA	THEE 105 or 107
___ THE	220	Musical Thtr	3	TBA	THEE 111

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

TRANSPORTATION MANAGEMENT

School of Business and Technology
Division of Business Systems
Business Building Room 105 967-4325

Faculty

Assistant Professor: Lynn Suksdorf; *Instructors:* Bob Foster, Don Gren

The Program

Transportation Management prepares individuals for employment in transportation, warehousing and inventory management, domestic and international forwarding and traffic management. Employment opportunities are excellent. Wage rates are usually at or above rates of other industries.

The Certificate program prepares individuals for employment with carriers, shippers or freight warehousers. An AAS Degree provides training necessary to interpret freight tariffs, work with personnel programs and also to work knowledgeably in sales, operations, and traffic functions, with all transportation modes and in international business. ***If students desire to transfer to a four-year college they should pursue the Associate of Science Degree.***

Preparation Note

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete a degree. The classes designed to assist students in reaching the skill level necessary to enter the certificate and degree programs are: BUS 080 (Business Math), BUS 101 (Business English), CIS 102 (Computer Information Systems), OIS 108 (WordPerfect for Non-OIS Majors). Any class in the preparatory skills may be waived if the student can demonstrate equivalent skill.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Elective Options

Any credit course numbered 101 and above (except General Education), may be substituted for listed elective courses with prior approval of advisor and/or division chair.

Cooperative Education is the college's strategy for recognizing and rewarding new learning associated with study-related employment in a business, industrial, or government work environment. Credit earned from TRM 200 is applied toward graduation requirements as Business Elective credit.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated book and supply costs: $125-$150 per quarter.

CERTIFICATE

(Minimum 52 Credit Hours Required)

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	101	Introduction to Business	4

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
___ ACCT	101	Elem Acct I	4	A	FIN 138 or w/FIN 138
___ ACCT	102	Elem Acct II	4	A	ACCT 101,FIN 138
___ BUS	115	Bus Com	3	A	BUS 101, ENG 101
___ CIS	140	Bus Cmptr Apl	3	A	ACCT 101, CIS 102
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	Eng Comp	4	A	pre-test
___ FIN	120	Prsnl Finance	4	A	none
___ FIN	138	Fin Math	5	A	pre-test
___ MGT	101	Intro to Bus	4	A	none
___ MGT	160	Prcpl of Supv	5	A	none
___ MGT	205	Lgl Envr Bus	5	A	none
___ MKTG	103	Intro to Mrktg	5	A	none
___ TRM	101	Intro Dist Sys	3	A	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 102 Credit Hours Required)

Suggested First Quarter			Credits
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	101	Introduction to Business	4

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ FIN	138	Fin Math	5	A	pre-test
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Major Course Requirements (73 credits)

___	ACCT 101	Elem Acctg I	4	A	FIN 138 or w/FIN 138
___	ACCT 102	Elem Acctg II	4	A	ACCT 101, FIN 138
___	ACCT 203	Mgrl Acctg	4	A	ACCT 102
___	BUS 115	Bus Com	3	A	BUS 101, ENG 101
___	BUS 230	Bus Rpt Wrtg	3	F,W,Sp	BUS 115
___	CIS 140	Bus Cmptr Apl	3	A	ACCT 101. CIS 102
___	ECN 201	Macro Ecn	4	A	MGT 101
___	FIN 120	Prsnl Finance	4	A	none
___	MGT 101	Intro to Bus	4	A	none
___	MGT 160	Prcpl of Sup	5	A	none
___	MGT 205	Lgl Envr Bus	5	A	none
___	MGT 240	Intnl Trd Bus	4	F,Sp	ECN 201, MGT 101
___	MKTG103	Intro to Mrkg	5	A	none
___	TRM 101	Intro Dist Sys	3	A	none
___	TRM 201	Carrier Mgt	5	F	TRM 101
___	TRM 202	Trans Ecn	3	Sp	ECN 201
___	TRM 205	Logistics Mgt	5	W	TRM 101
___	TRM 212	Risk/Loss Mgt	5	Sp	TRM 101
___	**Electives**				
	TRM 200	Trans CO-OP	3-6	A	Soph & permission
	TRM 299	Crt Tpcs Trans	1-5	TBA	variable

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF SCIENCE DEGREE

(Minimum 96 Credit Hours Required)

Students desiring to transfer to four-year colleges should pursue this degree.

Suggested First Quarter			**Credits**
ACCT	101	Elementary Accounting I	4
FIN	138	Financial Math	5
MGT	105	Business Law I	5

Course			Cr	Taught*	Prerequisites
General Requirements (52 credits)					
	Core Academic Skills				
___	CIS 102	CIS Intro	4	A	none
___	COM 110	Org Intpl Com	3	A	none
___	ENG 101	English Comp	4	A	pre-test
___	ENG 102	English Comp	4	A	ENG 101
___	MTH 105	Col Algebra	5	A	MTH 101
___	PE	Physical Educ	2	A	none
	American Institutions				
___	HIS 170	American Civ	5	A	none
		or			
___	POLI 110	Am Ntl Gov	5	A	none
	General Education				
___	Biological Science		5	A	variable
___	Humanities		5	A	variable
___	Interdisciplinary Course		5	A	variable
___	Physical Science		5	A	variable
___	Social Science		5	A	variable

(See pages 10 & 11 for specific general education requirements for the AS degree and list of courses in these fields)

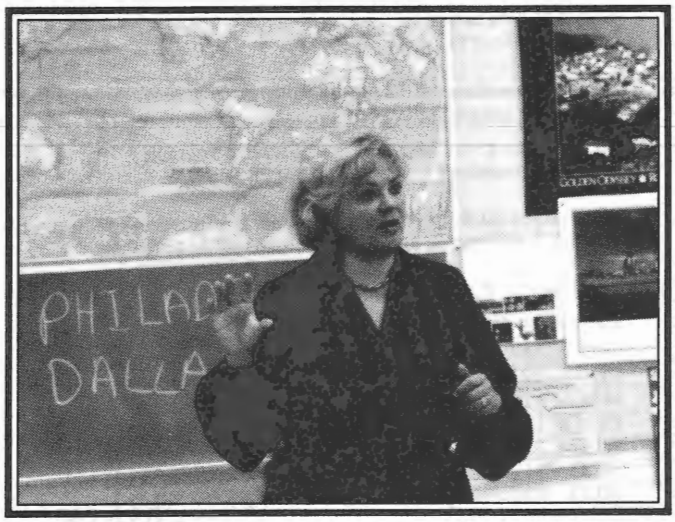
Major Course Requirements (45 credits)

___	ACCT 101	Elem Acct I	4	A	FIN 138 or w/FIN 138
___	ACCT 102	Elem Acct II	4	A	ACCT 101, FIN 138
___	ACCT 203	Mgrl Acct	4	A	ACCT 102
___	BUS 115	Bus Com	3	A	BUS 101, ENG 101
___	BUS 215	Calc for Bus**	4	A	MTH 105
___	ECN 201	Macro Ecn	4	A	MGT 101
___	ECN 202	Micro Ecn	4	A	MGT 101
___	FIN 138	Fin Math	5	A	pre-test
___	MGT 205	Lgl Envr Bus	5	A	none
___	MGT 220	Bus Statistics I	4	A	MGT 101, MTH 101
___	MGT 230	Bus Statistics II	4	A	MGT 220, MTH 105

**A*= All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

** BUS 215 is not required for Business Education and Marketing Education majors at some four-year universities and colleges.

☞ COM 120, PSY 101 and SOC 101 are recommended if transferring to the University of Utah. (One course in philosophy must be taken after transferring there.)



TRAVEL TRAINING

School of Continuing & Community Education
Division of Continuing Education
Construction Trades Building Room 238 967-4201
Director Fred Rose

The Program

The Travel Training program is designed to provide students with the skills necessary to succeed in the travel industry. Placement services are provided by the College. The program is two quarters in length, with new programs beginning each fall and spring.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

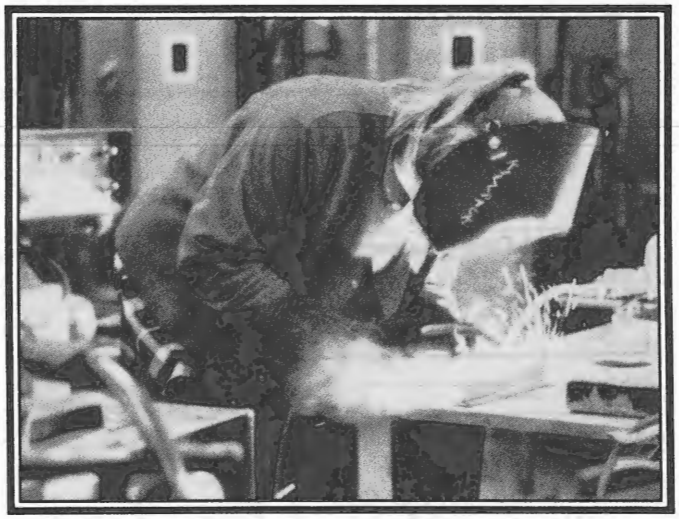
Estimated book and supply cost: $50

CERTIFICATE

Suggested First Quarter		Credits
TRAA 191	Domestic Travel & Ticketing	3
TRAA 193	Travel Sales	3
TRAA 196	Domestic Geography	3

Course		Cr	Taught*	Prerequisites
___ TRAA 191	Dom T & T	3	F,Sp	none
___ TRAA 192	Intl T & T	3	W,Su	TRAA 191,196
___ TRAA 193	Travel Sales	3	F,Sp	w/TRAA 191,196
___ TRAA 194	Cmptr Training	3	W,Su	TRAA 191,196
___ TRAA 195	Travel Acct	2	W,Su	TRAA 191
___ TRAA 196	Dom Geography	3	F,Sp	none
___ TRAA 197	Intl Geography	3	W,Su	TRAA 196

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable



WELDING

School of Occupational Education
Division of Mechanics
Auto Trades Building Room 206 967-4138

Faculty

Associate Professors: Robert Langford, David Westley; *Assistant Professors:* Wade Butler, Steve Ford, Seth Ontiveros; *Instructor:* Dale Watts

The Program

All common methods of arc welding, acetylene, and inert gas welding techniques are taught. A graduate welder is capable of welding ferrous and nonferrous metals in all positions and can operate shears, rolls, drills and brakes. A knowledge of metals and metallurgy is required. A welder is competent in layout, cutting, and forming metals and determines electrodes and filler metal to be used. He/she works from blueprints and written procedures and knows welding symbols. Good physical condition and good eyesight are essential.

Students who need to take preparatory classes to meet the requirements of First Quarter courses should plan on extra time to complete program.

Prerequisites

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken.

Special Requirements

Good eyesight, good eye-hand coordination, and basic reading and math skills.

Elective Options

If a student is employed in a job involving Welding, it is possible to earn some laboratory credit through Cooperative Education. With prior approval of a teaching faculty member and the faculty CO-OP coordinator for the Division of Mechanics, the student would register for the regular laboratory course. (A "Section 80" designation identifies that credit is being earned through CO-OP.)

Class Availability

The quarters in which courses are taught are listed here and in the course descriptions. The student should check the quarterly class schedule for day/evening availability and modifications caused by varying enrollment.

Books and Supplies

Estimated cost for tools and supplies: $385
Estimated cost for books per quarter: $55

DIPLOMA

(Minimum 102 Credit Hours Required)

Suggested First Quarter			Credits
IND	147	Math for Industry	5
WLD	111	Fundamentals of Welding	5
WLD	112	Welding Practices I Arc & Acetylene	7

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
Required (102 credits)					
___ COM	110	Org Intpl Com	3	A	none
___ IND	147	Math for Ind	5	F,W,Sp	permission
___ LE	122	Cr Dvlpmnt	3	A	none
___ MACH	120	Rel Machine Shp	3	F,W,Sp	none
___ PTM	110	Prcpls of Tech I	4	TBA	none
___ WLD	111	Fndmtls of Weld	5	F,W	w/WLD 112
___ WLD	112	Prctcs I A & A	7	F,W	w/WLD 111
___ WLD	121	Thry of W & C	5	W,Sp	WLD 11,112 w/WLD 122
___ WLD	122	Prctcs II A & A	7	W,Sp	WLD 11,112 w/WLD 121
___ WLD	130	Prctcs III A & A	7	Sp,Su	WLD 111,112 w/WLD 131
___ WLD	131	Thry of Weld	5	Sp,Su	WLD 121,122 w/WLD 130
___ WLD	141	Bprnt Reading	5	Sp,Su	none
___ WLD	148	Math for Weld II	5	W,Sp	IND 147
___ WLD	214	Wire Feed	7	F,W	WLD 130,131
___ WLD	215	Mrgy of F Mtl	5	F,W	WLD 130,131
___ WLD	225	Weld N-F Mtl	9	F,W	WLD 130,131
___ WLD	227	Adv BPR &QC	5	F,W	WLD 141 or perm
___ WLD	231	Pipe Weld Prc	2	Sp,Su	WLD 130, 131 or equiv
___ WLD	233	Layout Tech	3	Sp,Su	WLD 130, 131 or equiv
WLD	234	Apl Fab/ Pipe W	7	Sp,Su	WLD 130, 131 or equiv
Related Classes					
— WLD	104	Mtl Sculpturing	3	F,W,Su	none
WLD	105	Rel Welding	3	F,W,Sp	none
WLD	107	Bsc Arc/Acetln	6	F,W,Sp	none
WLD	108	Weld Lt Gge Met	3	F	none
WLD	192	Specialty Weld	7	F,W,Sp	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

ASSOCIATE OF APPLIED SCIENCE DEGREE

(Minimum 128 Credit Hours Required)

Suggested First Quarter			Credits
IND	147	Math for Industry	5
WLD	111	Fundamentals of Welding	5
WLD	112	Welding Practices I Arc & Acetylene	7

Course			Cr	Taught*	Prerequisites
General Requirements (29 credits)					
Core Academic Skills					
___ COM	110	Org Intpl Com	3	A	none
___ ENG	101	English Comp	4	A	pre-test
___ IND	147	Math for Ind	5	F,W,Sp	permission
___ Reading level (determined by dept)					
General Education					
___ Interdisciplinary Course			5	A	variable

___ Choose an additional 12 credit hours from at least three of the following general education areas:

Biological Science — Physical Science
Humanities — Social Science

(See pages 10 & 11 for specific general education requirements for the AAS degree and list of courses in these fields)

Course			Cr	Taught*	Prerequisites
Major Course Requirements					
Required (102 credits)					
___ IND	147	Math for Ind	5	F,W,Sp	permission
___ LE	122	Cr Dvlpmnt	3	A	none
___ MACH	120	Rel Machine Shp	3	F,W,Sp	none
___ PTM	110	Prcpls of Tech I	4	TBA	none
___ WLD	111	Fndmtls of Weld	5	F,W	w/WLD 112
___ WLD	112	Prctcs I A & A	7	F,W	w/WLD 111
___ WLD	121	Thry of W & C	5	W,Sp	WLD 11,112 w/WLD 122
___ WLD	122	Prctcs II A & A	7	W,Sp	WLD 11,112 w/WLD 121
___ WLD	130	Prctcs III A & A	7	Sp,Su	WLD 111,112 w/WLD 131
___ WLD	131	Thry of Weld	5	Sp,Su	WLD 121,122 w/WLD 130
___ WLD	141	Bprnt Reading	5	Sp,Su	none
___ WLD	148	Math for Weld II	5	W,Sp	IND 147
___ WLD	214	Wire Feed	7	F,W	WLD 130,131
___ WLD	215	Mrgy of F Mtl	5	F,W	WLD 130,131
___ WLD	225	Weld N-F Mtl	9	F,W	WLD 130,131
___ WLD	227	Adv BPR &QC	5	F,W	WLD 141 or perm
___ WLD	231	Pipe Weld Prc	2	Sp,Su	WLD 130, 131 or equiv
___ WLD	233	Layout Tech	3	Sp,Su	WLD 130, 131 or equiv
WLD	234	Apl Fab/ Pipe W	7	Sp,Su	WLD 130, 131 or equiv
Related Classes					
WLD	104	Mtl Sculpturing	3	F,W,Su	none
WLD	105	Rel Welding	3	F,W,Sp	none
WLD	107	Bsc Arc/Acetln	6	F,W,Sp	none
WLD	108	Weld Lt Gge Met	3	F	none
WLD	192	Specialty Weld	7	F,W,Sp	none

**A*=All quarters, *F*=Fall, *W*=Winter, *Sp*=Spring, *Su*=Summer, *TBA*=variable

WELDING

Suggested First Quarter

This is an open entry/open exit program. Students may enroll anytime and complete when they meet the educational objectives *The hours completed do not apply toward other college programs.*

Special Requirements

Good eyesight, good eye-hand coordination, and basic reading and math skills.

General Information

This program enables a student to develop entry-level skills in the steel fabricating and welding industries. The student will have the choice of concentrating on either welding or fabrication layout or a combination of both. Safety and good work habits are emphasized.

Job Information

Includes occupations primarily concerned with joining, surfacing or otherwise fabrication or repairing structures or parts of steel or other metals, applying the following welding or cutting processes: arc, gas, and wire feed machines.

Courses *(Non-Credit)*	Hours
Oxyacetylene Welding and Cutting	200
All Positions	
Braze Welds	
Cutting	
Pipe Welds	
Arc Welding	730
All Positions	
Use of Arc Air Torch	
ASME Certification	
GMAW -FCAW-GTAW	
Practice Pipe Welding**	
Blueprint Reading/Layout	150
Specification/Dimensions	
Welding Symbols	
Fitting Up-Welding from Prints	
Job Club	60
Total Hours	**1140**

** Additional hours of practice to achieve a higher skills level in the above will be highly beneficial.

FLEXIBLE ENROLLMENT PROGRAM

The Welding program is divided into competency-based modules. After completing individualized prerequisite modules, students may enroll for any one module or combination of modules to gain specific skills. These modules are offered for credit/non-credit. For further information please contact Julie Hoelle at 967-4097 or the Department Coordinator, Metal Trades Bldg. Rm 220.

PLEASE NOTE: The Flexible Enrollment Program is offered in addition to the full quarter requirements for the diploma or degree.

COURSE DESCRIPTIONS

ACCT 101 Elementary Accounting I **4**

A *Prerequisite: FIN 138 or concurrently with FIN 138*

Basic structure of accounting. Understanding asset, liability, capital, revenue, and expense accounts. The accounting cycle, special journals, receivables, payables and payroll. Includes worksheet, adjustments, reversing and closing entries.

ACCT 102 Elementary Accounting II **4**

A *Prerequisites: ACCT 101, FIN 138*

Study of inventories, plant assets, depreciation, current and long-term liabilities, partnerships, corporation organization, operation and financing, and the statement of cash flows.

ACCT 103 Cost Analysis **4**

A *Prerequisite: ACCT 102*

Study of the principles of cost accounting and financial statement analysis. Course objectives include a review of accounting for materials, labor and factory overhead, job order cost accounting, process cost accounting, standard cost accounting, and cost analysis for management decision making.

ACCT 190 Special Projects (NAA) **1**

F,W,Sp *Prerequisite: None*

The course explores topics in the accounting industry not covered by other classes, and provides support to the Salt Lake Community College Chapter of the National Association of Accountants.

ACCT 200 Accounting Cooperative Education **3-6**

A *Prerequisites: Completion of two quarters of the total program with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.*

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the job and the program major.

ACCT 203 Managerial Accounting **4**

A *Prerequisite: ACCT 102*

Developing and using accounting information essential for management decisions. Stresses the use of accounting information, including the analysis of the basic statements in making management decisions. Included in the course are cost-volume-profit analysis, cost accounting, budgeting, capital investment decisions and cash flow reporting.

ACCT 204 Intermediate Accounting I **4**

F *Prerequisite: ACCT 102*

Study of the accounting profession, review of the accounting process and conceptual framework, the statement of income andretained earnings the statement of financial position (balance sheet) and the statement of cash flows, concepts of future and present values, cash, receivables, and inventories.

ACCT 205 Intermediate Accounting II **4**

W *Prerequisite: ACCT 204*

A continuation of ACCT 204. Topics include operational assets, intangible assets, income recognition, short-term liabilities, accounting for long-term debts by the borrower and the lender, and accounting for corporations.

ACCT 206 Intermediate Accounting III **4**

Sp *Prerequisite: ACCT 205*

A continuation of ACCT 205. Topics include investments in securities, consolidated financial statements, statements of cash flows, accounting for pensions, accounting for leases, earnings per share, financial statement analysis, accounting for income taxes, accounting for changes and error corrections, and financial reporting.

ACCT 209 Federal Income Tax **5**

W *Prerequisite: ACCT 102*

Introduction to federal tax legislation and a summary review of the I.R.S. code. Application of various income tax forms that will meet the basic needs of the average taxpayer. Manual and computerized preparation of individual income tax returns. Relates primarily to individual tax problems. Includes some corporation and partnership problems.

ACCT 215 Cost Accounting **4**

F *Prerequisite: ACCT 102*

Prepares students to understand and manage cost accounting systems and problems encountered in the business world. Topics covered will include cost planning, cost accumulation procedures, controls and reports, and analysis.

ACCT 218 Audit Preparation **4**

Sp *Prerequisites: ACCT 205, or equivalent*

Introduces the theoretical and practical applications of preparing business records for an audit. Will focus on the importance of keeping records up-to-date and balances well documented.

ACCT 299 Current Topics in Accounting **1-5**

TBA *Prerequisites: Variable to Topic or Project*

This course will vary from quarter to quarter, but will present a forum where the student will be introduced to topics of current interest and demand in the field of accounting. Topics relevant to the accounting student will be introduced to enhance preparation for work and/or continued study in accounting. Special project required.

ACR 110 Auto Collision Repair **7**

F *Prerequisite: Concurrent with ACR 111*

Comprehensive welding course covering welds used in rebuilding automobiles. Includes repair procedures.

ACR 111 Metallurgy and Processing **5**

F *Prerequisite: Concurrent with ACR 110*

Composition and characteristics of ferrous and non-ferrous metals. Includes fabrication process and use in sheet metal design and welding.

ACR 120 Auto Collision Reconstruction **7**

W *Prerequisites: ACR 110-111 Concurrent with ACR 121*

Repair of auto body and frame damage, panel replacement, trim and hardware service, glass service, electrical service dents, and body mechanics.

ACR 121 Stress Analysis, Specifications, and Repair Principles **5**

W *Prerequisites: ACR 110-111 Concurrent with ACR 120*

Study of stress conditions and dimensional relations before and after collision. Accurate damage analysis and repair sequence planning. Specifications, body measurements, tolerance, and four-wheel alignment.

ACR 130 Advanced Auto Collision Reconstruction **7**

Sp *Prerequisites: ACR 120-121 Concurrent with ACR 131*

Continued laboratory practice on all types of auto collision damage. Emphasis on timing repair projects to determine individual production potential.

ACR 131 Estimating and Alignment **5**

Sp *Prerequisites: ACR 120-121 Concurrent with ACR 130*

Damage repair estimating using flat rate manuals and estimating forms. Includes estimating non-measurable damage. Suspension systems and steering geometry.

AHER 101 Management Planner 1

TBA Prerequisite: None

Coordination and implementation of LEA planning. Includes review of regulatory and legal implications, development of operations and maintenance plans, record keeping and hazard assessment. Meets all EPA requirements for certification of AHERA Asbestos Management Planners. Recommended for staff and management personnel involved in AHERA asbestos removal programs.

AHER 102 Asbestos Inspector Training 1

TBA Prerequisite: None

Coordination and implementation of asbestos inspection procedures. Technical and regulatory aspects of asbestos inspection including legal aspects, health effects, inspection and assessment personal protection, sampling, documentation and communications. This course is required for all AHERA Asbestos Inspectors and Management Planners. It is recommended for any individual involved in the AHERA asbestos removal program.

AIRR 101 The Air Force Today I 1

F Prerequisite: Concurrent registration in AIRR 101L

Introduces Air Force doctrine and strategy, functions and organization of the Air Force, and roles and missions of the various commands.

AIRR 101L GMC Leadership Laboratory I 0

F Prerequisite: None

Studies and experience in Air Force standards, customs and courtesies. Introduction to drill and ceremonies. Typical organizations and missions of Air Force bases studies through field trips.

AIRR 102 The Air Force Today II 1

W Prerequisite: Concurrent enrollment in AIRR 102L

Functions of Air Force Strategic offensive and defensive forces and general-purpose forces, and command and control of those forces.

AIRR 102L GMC Leadership Laboratory II 0

W Prerequisite: None

Studies and experience in Air Force standards, customs and courtesies. Introduction to drill and ceremonies. Typical organizations and missions of Air Force bases studied through field trips.

AIRR 103 The Air Force Today III 1

Sp Prerequisite: Concurrent registration in AIRR 103L

Functions and operations of Air Force Support Commands.

AIRR 103L GMC Leadership Laboratory III 0

Sp Prerequisite: None

Studies and experience in Air Force standards, customs and courtesies. Introduction to drill and ceremonies. Typical organizations and missions of Air Force bases studied through field trips.

AIRR 201 The Development of Air Power I 1

F Prerequisite: Concurrent registration in AIRR 201L

Factors contributing to change in the nature of military conflict. Development of air power into a primary element of national security and related doctrines through 1941. Evaluation of oral communication skills.

AIRR 201L GMC Leadership Laboratory IV 0

F Prerequisite: None

Application of Air Force standards, customs and courtesies. Drill and ceremonies leadership, introduction to reviews and honors. First-hand exposure to various career opportunities within the Air Force and their application on a typical Air Force base.

AIRR 202 The Development of Air Power II 1

W Prerequisite:Concurrent with 202L

Air doctrine and strategies from W.W. II through the Korean conflict. The emergence of the independent U.S. Air Force, and the use of air power in nonmilitary operations in support of national objectives.

AIRR 202L GMC Leadership Laboratory V 0

W Prerequisite: None

Application of Air Force standards, customs and courtesies. Drill and ceremonies leadership, introduction to reviews and honors. First-hand exposure to various career opportunities within the Air Force and their application on a typical Air Force base.

AIRR 203 The Development of Air Power III 1

Sp Prerequisite: None

Defense strategies as they relate to air power from the 1950's through the Vietnam conflict to today.

AIRR 203L GMC Leadership Laboratory VI 0

Sp Prerequisite: None

Application of Air Force standards, customs and courtesies. Drill and ceremonies leadership. Preparation for summer field training.

AMT 101 Blueprint Reading for Aircraft Mechanics 5

TBA Prerequisite: None

Study of drawing, symbols, schematic diagrams, interpreting electrical systems, drawing sketches of repair/alterations, reading/interpreting drawings, using graphs/charts.

AMT 105 Math for Aircraft Mechanics 5

TBA Prerequisite: None

Review of whole numbers, fractions, decimals, fraction conversions, extracting roots, raising numbers to a given power, determining areas, volumes, geometrical shapes, solving ratio, proportions, percentages, performing algebraic operations involving addition, subtraction, multiplication, division of positive and negative numbers as required in the aviation industry.

AMT 110 General I Lab 7

TBA Prerequisite: Concurrent with AMT 111

Technical information and laboratory projects necessary for the practical application to learn concepts of basic electricity and aircraft drawings, basic physics, cleaning/corrosion control, materials/processes, maintenance forms/records, publications, and mechanics privileges. Also concepts of ground operation servicing, weight/balance, and fluid lines/fittings.

AMT 111 General I Theory 8

TBA Prerequisite: Concurrent with AMT 110

Theories, principles, concepts of basic electricity, aircraft drawings, basic physics, cleaning/corrosion control, materials/processes, maintenance forms, records, publications/mechanics privileges. Concepts of ground operation, servicing, weight/balance, and fluid lines/fittings.

AMT 120 Air Frame I Lab 7

TBA Prerequisites: AMT 110-111 Concurrent with AMT 121

Technical information and laboratory projects necessary for the practical application and understanding of theories, principles/concepts of aircraft/engine fuel, instrument, fire protection systems, welding, communications, navigation systems, wood/sheet metal structures, aircraft covering/finishes and cabin atmosphere control systems.

AMT 121 Air Frame I Theory 8

TBA Prerequisites: AMT 110-111, Concurrent with AMT 120

Theories, principles, concepts of aircraft/engine fuel, instrument, fire protection systems, welding, communications/navigational systems, wood/sheet metal structures, aircraft covering/finishes, cabin atmosphere control systems.

AMT 130 Air Frame II Lab 7

TBA Prerequisites: AMT 120-121 Concurrent with AMT 131

Technical information, laboratory projects necessary for the practical application and understanding of theories, principles, concepts of ice and rain control, hydraulic and pneumatic power systems, landing gear, position/warning systems, assembly/rigging, and aircraft electrical systems.

AMT 131 Air Frame II Theory 8

TBA Prerequisites: AMT 120-121, Concurrent with AMT 130

Theories, principles, and concepts of ice rain control, hydraulic/ pneumatic power systems, aircraft landing gear, position/warning systems, assembly/ rigging, and aircraft electrical systems.

AMT 210 Powerplant and Air Frame I Lab 7

TBA Prerequisites: AMT 110-111 Concurrent with AMT 211

Technical information, laboratory projects necessary for the practical application, understanding of theories, principles/concepts of fuel systems, induction, engine cooling, engine exhaust, fire protection, engine instruments, lubrication/ignition, return to service inspections, and written testing.

AMT 211 Powerplant and Air Frame I Theory 8

TBA Prerequisites: AMT 110-111, Concurrent with AMT 210

Theories, principles, and concepts of fuel systems, induction, engine cooling, engine exhaust, fire protection, engine instruments, lubrication and ignition, return to service inspections, and written testing.

AMT 220 Powerplant II Lab 7

TBA Prerequisites: AMT 120-121, Concurrent with AMT 221

Technical information and laboratory projects necessary for the practical application and understanding of theories, principles, and concepts of powerplant, reciprocating engines, propellers, and fuel metering.

AMT 221 Powerplant II Theory 8

TBA Prerequisites: AMT 120-121, Concurrent with AMT 220

Theories, principles, and concepts of powerplant, reciprocating engines, propellers and fuel metering.

AMT 230 Powerplant III Lab 7

TBA Prerequisites: AMT 210-211 Concurrent with AMT 231

Technical information and practical application of theories, principles, and concepts of turbine engines, electrical systems, return to service inspections, and written testing.

AMT 231 Powerplant III Theory 8

TBA Prerequisites: AMT 210-211, Concurrent with AMT 230

Theories, principles, and concepts of turbine engines, electrical systems, return to service inspections, and written testing

AP 110 Automotive Painting Lab 7

F Prerequisite: Concurrent with AP 111

Procedures and practices in handling equipment, use of materials, and basic surface preparations for painting.

AP 111 Automotive Painting Theory 5

F Prerequisites: Concurrent with AP 110

Classroom instruction on the use and maintenance of equipment, painting materials, and preparation of surfaces.

AP 120 Color Application Lab 7

W Prerequisites: AP 110-111 Concurrent with AP 121

Practice of the techniques of color application and preparation of color paint. Preparation and painting of automobiles.

AP 121 Color Application Theory 5

W Prerequisites: AP 110-111 Concurrent with AP 120

Techniques of color application and preparation of color paint.

AP 130 Color Matching Lab 7

Sp Prerequisites: AP 120-121 Concurrent with AP 131

Laboratory practice in mixing and matching colors by formula with a color mixing machine. Skill development in preparing surfaces and applying paint.

AP 131 Color Matching Theory 5

Sp Prerequisites: AP 120-121 Concurrent with AP 130

Theory of mixing and matching colors by formula.

ART 160 Beginning Pottery 2

TBA Prerequisite: None

An introduction to the use of the potter's wheel. Beginning students become familiar with terms, tools and techniques used to create functional objects with the potter's heel.

ART 163 Hand Formed Pottery 2

TBA Prerequisite: None

The understanding of the plastic nature of clay is best developed when hand-forming techniques are used. A variety of techniques including slab, pinch, coil, and extruding.

ART 165 Intermediate Pottery 2

TBA Prerequisite: ART 160 or permission of instruction

Further studies of pottery techniques. Students refine skills and develop a working knowledge of glazes, kiln, and hand building techniques.

ART 171 Beginning Painting, Watercolor 3

F,Su Prerequisite: None

An exploration of various watercolor techniques in conjunction with discussions on composition. Still life and outdoor studies are used. *(This course is also listed as GD 171)*

ART 172 Beginning Painting, Oil 3

W,Sp Prerequisite: None

Fundamental craft and procedures inherent in oil painting practice. Still life and outdoor studies are used. *(This course is also listed as GD 172)*

ART 181 Intermediate Painting, Watercolor 3

Sp,Su Prerequisite: ART 171

A continuation of ART 171. Further development of various watercolor techniques and composition. *(This course also listed As GD 181)*

ART 182 Intermediate Painting, Oil 3

F,W Prerequisite: ART 172

A continuation of ART 172. Further development of oil painting. Composition and color is emphasized. *(This course also listed as GD 182)*

ART 250 Art For Elementary Teachers 3

F Prerequisite: None

Theory and practice for teaching art in the elementary school. *(This course is also listed as ECD 250)*

ART 265 Advanced Pottery 2

TBA Prerequisite: ART 165 or permission of instructor

Individual assignments and instruction to develop specific skill and knowledge in each student.

ART 299 Special Studies in Graphic Design 1-3

A Prerequisite: Prior agreement with instructor

Provides students with an opportunity to pursue advanced or special studies in a particular area of interest. Credit hours, subject, and course of study, shall be determined prior to registration by consultation and written agreement between instructor and student. The course of study may include design and production pieces for the Department Art Show. A maximum of 3 credit hours may be used toward diploma or degree. *(Also listed as GD 299)*

ARTT 174 Figure and Portrait Painting 3

TBA Prerequisite: None

This class will be conducted with live models and is designed for the beginning and experienced painter. Problems in anatomy as expression will be considered. Open lab for figure drawing.

ARTT 175 Figure Drawing 3

TBA *Prerequisite: None*

This class will be conducted with live models and is designed for the beginning and experienced draftsman. Problems in anatomy as expression will be considered. Open lab for figure drawing.

AST 101 Fundamentals of Automated Systems 3

F,W,Sp *Prerequisite: None*

Survey of the automated systems program. Involves a general overview, guest speakers and field trips.

AST 105 Fundamentals of Electronics 7

F,W,Sp *Prerequisite: AST 101*

Analysis of DC and AC circuitry including units of measurements, Ohm's law, Kirchoff's law; fundamentals of magnetism, meters, generators, motors, resistance, capacitance, inductance, and mathematical application. Lab includes use of electronic devices to measure, construct, and test electrical circuits.

AST 106 Industrial Electronics 6

F,W,Sp *Prerequisites: AST 105, MTH 101*

Introduction to Automated Electronics. Includes a study of basic components, thyristors, transducers, motors, generators, linear and digital integrated circuits, gates, flip-flops, power supplies, control circuits, electronic controls, trouble shooting, practical applications.

AST 110 Mechanisms and Devices .3

Sp *Prerequisite: Concurrent with AST 106*

Application of physics principles of mechanics to gears, cams, and other devices in relation to the systems they interface with. Includes lab.

AST 200 Automated Systems Technology Cooperative Education 3-12

A *Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.*

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the job and the program major.

AST 205 Power Systems 5

F *Prerequisite: AST 106*

Generation, distribution, control and utilization of power in electrical, hydraulic, and pneumatic forms. Considers the practical aspects of generators, compressors, motors, actuators, distribution networks, converters, safety devices and considerations.

AST 221 Microprocessor Applications 5

W,Sp *Prerequisite: ELET 173*

A study of microprocessors and their application to Automated Systems. Includes microcontrollers and interface applications.

AST 230 Computer Applications: CNC/CAM 5

F *Prerequisite: ELET 173*

Includes computerized numerical theory, point-to-point milling and lathe operations, preparing calculations and machine language, CAM and Robotic applications and programming and interfacing of CNC/CAM/Robotics in Automated Systems.

AST 240 Telecommunications 5

W *Prerequisite: Instructor approval*

A study of basic telecommunications technology, digital data communication, transmission media and forms signaling, switching and networking.

AST 242 Heating and Cooling Systems 5

W,Sp *Prerequisite: PHY 118*

Includes a study of heat transfer, refrigeration, control systems and their application to automated systems. Lab included.

AST 250 Automated Data Acquisition 5

F *Prerequisite: AST 205*

Digital data acquisition and instrument control over the industry-standard GPIB (IEEE-488) interface bus. Considers the practical implications of digitization and similar basic concepts, then turns to TALKER, LISTENER and CONTROLLER functions as implemented on the GPIB bus.

AST 270 Computer Applications Robotics 5

F *Prerequisite: MTH 106*

Includes industrial applications of robotics and the theory associated with robotics, numerical and manual programming techniques and interfacing; designing and implementing into production of the associated industrial planning of robotic systems is stressed.

AST 290 Automated Electronic Systems 5

W *Prerequisites: ELET 121, ELET 131*

A study of the application of synchrogenerators and motor systems combined with servo motors, servo-amplifiers, stepper motors and other positioning devices. The lab consists of the construction, measurement and experimentation of involved circuitry.

AT 105 Basic Architectural Drafting 5

A *Prerequisite: None*

A study of the basic fundamental drafting techniques. The foundation of the course is to teach the basics of instruments used, line production, lettering technique and styles, and the standards and conventions used in architectural drafting.

AT 110 Architectural Drafting I 4

A *Prerequisites: AT 105 or previous approved Architectural Drafting classes or training*

Introduction to the Architectural Technology drafting sequence.

AT 111 Architectural Construction I 5

F,W *Prerequisite: None*

The study of basic procedures and organization of construction. Study of light wood framing. Framing systems including stick framing, trussed rafters, truss joists, glu-lams, various types of floor fasteners, connectors and hangers, and miscellaneous steel concrete construction used in connection with wood framing. Study includes investigation of building details and the application of such in free-hand sketches.

AT 113 Architectural CAD I 1

A *Prerequisite: AT 110*

This course is a general introduction of architectural concepts to computers; what they are and what they do. Students will review the types of hardware and software systems and terminology used. Course includes hands-on applications and simple drawings will be produced using CAD commands.

AT 115 Architectural Construction II 5

Sp *Prerequisite: None*

The study includes investigation of building materials and their use in building construction. A study of steel framing and details including joints, beams, columns, decking. Study of concrete systems and details including foundations, footings, beams, columns, slabs, pre-cast units. Study of masonry and details including steel reinforced masonry. Involves the use of freehand drawing techniques.

AT 120 Architectural Drafting II 4

A *Prerequisite: AT 110*

Study of data for planning and design and development of drawings for a small building.

AT 123 Architectural CAD II 1

A *Prerequisite: AT 113*

An intermediate course to further study AutoCAD commands. Architectural plans, sections and elevations are developed.

AT 130 Architectural Drafting III 4

A *Prerequisite: AT 120*

Experience in developing working drawings including fireplace, stair, masonry and frame walls, cabinet details.

AT 132 Structures I 4

F *Prerequisites: MTH 101*

Basic theory of forces, section modules, moment of inertia, shear, compression, tension, modules of elasticity, deflection, bending moments, and other forces in static structures.

AT 133 Architectural CAD III 1

A *Prerequisite: AT 123*

An advanced CAD class that develops working drawings of masonry, frame walls, sections, stair details, fireplace details, and door and window details, using AutoCAD.

AT 134 Architectural History 3

W *Prerequisite: None*

General survey of the history of Architecture, ancient through modern, and the effects of history on modern design and construction.

AT 200 Architectural Technology Cooperative Education (CAD) 3-5

A *Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.*

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major. Must have approval of department.

AT 202 Mechanical and Electrical Systems 3

A *Prerequisite: None*

Basic design of electrical, heating, ventilation & air conditioning, and plumbing requirements for commercial buildings. This will require working on the drafting boards and the computer.

AT 210 Architectural and Structural Detailing (CAD) 5

A *Prerequisite: Concurrent with AT 130*

Research in construction units and development of detail drawings for those units.

AT 211 Architectural Construction III 3

F *Prerequisite: None*

Planning and design data, landscape materials, site planning, site layout, services.

AT 212 Architectural Construction IV 3

W *Prerequisite: None*

Study of curtain walls, window walls, metal entrances, store front systems, windows and detailing.

AT 213 Architectural Construction V 3

Sp *Prerequisite: None*

Study of millwork and finish wood work; sheet metal and roofing, hard floors & wall coverings; furnishings; specialities; sound control; lateral forces.

AT 215 Structures II 4

W *Prerequisite: AT 132*

Introduction to structural systems involving the sizing of primary wood and steel members within these systems.

AT 216 Specifications--Supervision 2

W *Prerequisite: None*

Introduction to basic CSI specification format and the writing of specifications with the computer. Requires general construction knowledge and analysis of architectural building projects.

AT 220 Architectural Working Drawings (CAD) 5

A *Prerequisite: AT 210*

Planning, calculating, researching, and developing a commercial structure and preparing preliminary working drawings. Will involve working on both the drafting boards and computers.

AT 226 Structures III 4

Sp *Prerequisite: AT 215*

Introduction to reinforced concrete structural systems involving the sizing and reinforcement of primary members within these systems.

AT 229 Codes and Zoning 3

W *Prerequisite: None*

Study of the Uniform Building Code, Life Safety Code, Utah State Handicap Code, city-county codes and zoning ordinances.

AT 230 Architectural Working Drawings II 5

A *Prerequisite: AT 220*

Completion of working drawing on a small commercial structure including specifications, structural calculations, code search, and necessary data for the completion of architectural services.

AT 236 Perspective I 3

W,Sp *Prerequisite: AT 105 or AT 110*

Systems of representing an architectural project in one-point and two-point perspective with shades and shadows.

AT 237 Perspective II 3

Sp,Su *Prerequisite: AT 236*

Architectural techniques in rendering with pencil, pen and ink.

AT 239 Computerized Architectural Estimating 3

Sp *Prerequisite: None*

Developing cost and material estimates of a building project, involves working from drawings and computerized reference materials. Requires general construction architectural technology knowledge.

AT 299 Special Studies 1-3

TBA *Prerequisite: Permission of instructor*

This course is designed so the student can work on special individualized projects under the supervision of the instructor.

AUT 110 Four Wheel Alignment & Brakes Lab 7

F,W,Sp *Prerequisite: Concurrent with AUT 111*

Service procedures and shop practices in repair and maintenance of automotive front end and brake components for front end drive and conventional drive systems.

AUT 111 Four Wheel Alignment & Brakes Theory 5

F,W,Sp *Prerequisite: Concurrent with AUT 110*

Theory and function of components of the automotive front end. Includes nomenclature, brakes, steering correction, suspension systems, drive lines, universal joints and four wheel alignment.

AUT 120 Basic Tune-Up & Electrical Lab 7

F,W,Sp *Prerequisite: Concurrent with AUT 121*

Service of basic electrical system components and engine performance testing.

AUT 121 Basic Tune-Up & Electrical Theory 5

F,W,Sp *Prerequisite: Concurrent with AUT 120*

Theory of fuel system and introduction to fundamentals of electricity and engine performance.

AUT 130 Automotive Engines Lab 7

F,W,Sp Prerequisite: Concurrent with AUT 131

Skill development in use of tools, safety practices, diagnosis, measuring, servicing, repairing, and testing of both gas and diesel automotive engines.

AUT 131 Automotive Engines Theory 5

F,W,Sp Prerequisite: Concurrent with AUT 130

Theory of operation, parts nomenclature, production processes, and major overhaul procedures of both the gas and diesel automotive engine.

AUT 210 Computer Electronics & Advanced Fuel Systems Lab 7

F,W,Sp Prerequisites: AUT 110-111, 120-121, 130-131 Concurrent with AUT 211

Diagnosis, service, and repair of auto electronic components, instrumentation, and fuel systems. Auto emissions control systems service. Engine tune-up procedures. Use of testing equipment and analyzers. *(Credit for this course may be earned through Cooperative Education)*

AUT 211 Computer Electronics & Advanced Fuel System Theory 5

F,W,Sp Prerequisites: AUT 110-111, 120-121, 130-131. Concurrent with AUT 210

Theory and function of auto electronic systems and components and emissions control devices. Theory in the use of testing equipment and devices. Application of advanced servicing techniques.

AUT 220 Drive Mechanisms Lab 7

F,W,Sp Prerequisites: AUT 110-111, 130-131 or as authorized by instructor. Concurrent with AUT 221

Service and repair of automotive drive mechanisms, automatic transmissions, standard transmissions, drive lines, differentials, and rear axles. *NOTE: Credit for this course may be earned through Cooperative Education.*

AUT 221 Drive Mechanisms Theory 5

F,W,Sp Prerequisites: AUT 110-111, 130-131 or as authorized by instructor. Concurrent with AUT 220

Theory and operation of drive mechanisms. Includes automatic transmissions, standard transmissions, differentials, and rear axles.

AUT 230 Review & Diagnosis Lab 7

F,W,Sp Prerequisites: AM 110-111, 120-121, 130-131. Concurrent with AUT 231

Diagnosis and repair of specialty equipment and accessories which includes specialty emission systems, air conditioning and controls, vacuum systems, and speed controls. *(Credit for this course may be earned through Cooperative Education)*

AUT 231 Review & Diagnosis Theory 5

F,W,Sp Prerequisites: AM 110-121, 120-121, 130-131. Concurrent with AUT 230.

Theory of operation of the specialty equipment and accessories of today's modern vehicle, both domestic and imported.

AVI 103 Aircraft Familiarization 3

W,Su Prerequisites: None

This course prepares students with a non-aircraft background for entry into the Avionics track. Course covers the principles of flight and provides an introduction to major aircraft systems including the propulsion, control, fuel, electrical, hydraulic and pneumatic systems. This course may be waived for students with an A&P license or pilots license, or with a suitable aircraft background as determined by the program administrators.

AVI 110 Introduction to Avionics 4

W,Su Prerequisite: ELET 102 or ELET 103

Introduces students to Avionics Systems of modern aircraft, including communications, navigation, air data, automatic control, cockpit instrumentation and display, and engine instrumentation systems. The course also covers electrical and electromagnetic devices used in avionics systems. These include generators, motors, synchros, gyros and various transducers. This course provides the foundation for subsequent avionics courses.

AVI 120 Avionics Systems 4

W,Su Prerequisites: AVI 110 & ELET 110

Course covers a number of avionics systems that are not covered in other avionics courses. These are primarily systems that are found on large modern transport aircraft. Systems covered include engine instrumentation, fuel quantity, audio, passenger service and entertainment, airborne telephone, Selective Calling System (SELCAL) ARINC Communications Addressing and Reporting System (ACARS), voice recorder, and emergency locator recorder, and emergency locator beacon.

AVI 130 Aircraft Instrumentation 5

W,Su Prerequisites: AVI 110 & ELET 110

A study of the air data and gyroscopic instruments found on modern aircraft. Course includes the pitot-static system, altimeter, the vertical velocity, air speed, and mach indicators, central air data computer, altitude encoders, and transponders. Gyroscopic instruments covered are the attitude and directional indicating systems and the turn and bank/turn coordinator indicator. Also included are angle of attack and temperature indicating systems. Laboratory problems include testing, calibrating, and troubleshooting.

AVI 250 Navigation Systems 5

W,Su Prerequisites: AVI 110, ELET 121

Study of aircraft navigation systems including ADF, VOR, TACAN/DME, ILS, MLS, LORAN, OMEGA, INS, area navigation systems. Laboratory problems include testing and troubleshooting.

AVI 260 Autopilot Systems 5

W,Su Prerequisites: AVI 110, ELET 121

The study of control systems found on modern aircraft including the autopilot, Automatic Flight Control System (AFCS), and auto-throttle, auto-land, and stall warning systems. Also includes study of the flight director system. Digital signal and control links and digital control systems are examined. Laboratory problems include testing and troubleshooting an operational autopilot system.

AVI 270 Radar Systems 5

F,Sp Prerequisites: AVI 110, Concurrent with ELET 241

A study of airborne storm avoidance systems, including radar and electrical discharge systems. Course also includes ground-based weather and air traffic control radar systems. Laboratory problems include testing and troubleshooting.

BC 103 Residential Blueprint Reading 5

F,W Prerequisite: None

Theory of projection, architectural symbols, relationship of views and measurements, plan and elevation views, sections and details. Familiarization of terms, specifications, and abbreviations used in reading residential blueprints.

BC 104 Commercial Blueprint Reading 5

W,Sp Prerequisite: BC 103, or equivalent training.

A study of commercial plans and specifications with emphasis on the relationship of the architect, engineer, contractor, and owner.

BC 112 Carpentry Technology 5

F,W Prerequisite: None

Study and use of material, tools and practices used by carpenters and cabinet makers.

BC 116 Basic Carpentry Skills 5

F,W Prerequisite: None

Practical experience in care and use of hand and power tools used by the carpenter and cabinet maker. General safety practices are stressed.

BC 123 Cabinet Design 5

W,Sp Prerequisite: BC 112

Principles and methods used in design and layout of cabinet and mill work.

BC 127 Cabinet Construction 5

W,Sp Prerequisites: BC 112 and BC 116

Practical experience in layout and construction of cabinet and mill work. Includes work with plastic laminates, moldings, trim and wood finishing. General safety practices are stressed.

BC 133 Concrete Technology 5

Sp,Su Prerequisite: None

Building principles and methods of testing, forming, placing, finishing, and curing of concrete in footings, walls and slabs for residential and commercial buildings.

BC 137 Concrete Forming & Finishing 7

Sp,Su Prerequisite: None

Actual experience in construction, testing, forming, placement, finishing and curing of concrete in residential and commercial building.

BC 147 Carpentry Math I 5

F,W Prerequisite: None

Develops understanding and skills of math concepts and operations of addition, subtraction, multiplication, division, and their practical application to solving trade problems. Topics covered are common and decimal fractions, percentages, powers and roots, and ratios and proportions as they relate to consumer education and the carpentry trade.

BC 148 Carpentry Math II 5

W,Sp Prerequisite: BC 147

Continuation of Carpentry Math I. Requirements covering rules, and formulas, length surface, volume and angular measurements, and metric measurement. Introduction to estimating, stairs and roof problems using the basic math skills developed.

BC 200 Building Construction Cooperative Education 3-7

A Prerequisites: Completion of two quarters of the total program with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major.

BC 201 Construction Estimating 5

F,W Prerequisites: BC 103, BC 104

Material and labor takeoffs, sub-contractor estimates, material cost data-base, computerized takeoffs, computerized price extensions, competitive bidding.

BC 205 Building Codes 3

F,W Prerequisite: None

Study of city and state building codes, uniform building codes and minimum property standards.

BC 207 Construction Management 5

W,Sp Prerequisite: None

Project organization, job records, construction superintending, bar charts, arrow diagrams, critical path networks, use of computers in management.

BC 209 Contractor Preparation 5

F,Su Prerequisite: None

Overview of the construction industry, business ownership, company organization, bidding, construction contracts, bonds and insurance, labor laws and relations, computerized cost management, lien laws.

BC 210 Construction Concepts 5

F,Su Prerequisites: BC 133, BC 137

Theory of framing layout including floors, walls, stairways and popular roof designs.

BC 214 Framing Construction 7

F,Su Prerequisites: BC 133, BC 137

Advanced application of techniques involving instrument layout, layout of floor wall and roof framing, and shingling provided through the construction of a full size project house.

BC 220 Interior Construction Technology 5

F,W Prerequisites: BC 210, 214

Study of materials, energy and heat loss calculations, and methods used in interior construction. To include insulation, wallboard, interior finish, handrails, stairways and cabinets.

BC 224 Interior Construction 5

F,W Prerequisites: BC 210, BC 214

Experience in the application of insulation, wallboard, interior finish, handrails, stairways and cabinets.

BC 232 Exterior Construction Technology 5

W,Sp Prerequisites: BC 220, BC 224

Study of exterior trims, sidings, and finishes including cornice, sidings, painting, decks, patios, porches and steps; final preparations leading to the marketing phase.

BC 236 Exterior Construction 7

W,Sp Prerequisites: BC 220, BC 224

Application of materials covered in BC 232. Practice in methods and techniques of the building industry.

BC 240 Construction Specialties 5

TBA Prerequisites: BC 220, BC 224

Application of materials covered in BC 232. Practice in methods and techniques of the building industry.

BC 261 Masonry Concepts 2

F,W, Prerequisite: None

Application and practices of mixing and spreading mortar, laying bricks and blocks to a line with different types of joints. The use of spacing tape in relation to layout of windows and doors. General safety practices are stressed. This class is designed for building construction majors.

BIOL 101 General Biology *(BS)* 5

A Prerequisite: Concurrent with BIOL 102

Introduction to chemistry, biochemistry, cellular structure and function, genetics, evolution and taxonomy of living organisms. Requires five lectures and one two-hour lab per week.

BIOL 102 General Biology Lab 0

A Prerequisite: Concurrent with BIOL 101

Complementary to the lecture course. A rounded experience in biology principles, experimentation, data analysis, report generation, and data presentations.

BIOL 105 Introduction to Human Anatomy *(BS)* 5

A Prerequisite: None

An introduction to the principles of structure and function of human body systems: basic cell structure, biochemical function and genetic controls, and 10 major human organ systems.

BIOL 110 Human Ecology 3

F Prerequisite: None

A survey of world resources, the nature of resources, attitudes toward resources, environmental principles and the impact of populations on resource bases.

BIOL 120 Botany *(BS)* 5

A Prerequisite: Concurrent enrollment in BIOL 121

An introduction to Botany: plant form, function and reproduction, from algae to flowering plants. May be substituted for BIOL 101.

BIOL 121 Introductory Botany Laboratory 0

A Prerequisite: Concurrent enrollment in BIOL 120

Two hours of laboratory study each week devoted to illustrating important aspects of plant biology. Topics to be considered include plant anatomy, physiology, life cycle, and a survey of the plant kingdom.

BIOL 130 General Zoology *(BS)* 5

A Prerequisite: Concurrent with BIOL 131

An introduction to the animal kingdom: animal structure and function, evolution and survey of the animal kingdom.

BIOL 131 General Zoology Lab 0

A Prerequisite: Concurrent with BIOL 130

Two hours of lab each week in which basic principles of animal structure, development, physiology, and life history are studied. Written and oral reports are required.

BIOL 175 Trees & Wild Flowers of the Wasatch Front 4

Su Prerequisite: BIOL 120 or permission of instructor

Field identification of common members of the Wasatch front flora. Goals include learning common plants and learning to use a taxonomic key.

BIOL 180 Biology of Fresh Water 5

Su Prerequisites: BIOL 101, BIOL 120, or BIOL 130

A study of Utah's fresh water environments, including biological, chemical and physical influences on aquatic environments.

BIOL 188 Ecology 5

Sp Prerequisite: BIOL 101, or BIOL 120, or BIOL 130

Introduction to the field of ecology: energy flow in the biosphere, nutrient cycling, interspecific and intraspecific interactions, ecosystem structure and function, and biogeography.

BIOL 200 Biology Cooperative Education 3-6

A Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning in the program major.

BIOL 205 Human Anatomy 5

A Prerequisite: A college-level general biology course successfully completed within the last five years, or successful completion of Biology Proficiency Test or consent of the instructor. Must be concurrently enrolled in BIOL 206.

A systematic analysis of the entire human body from a micro and macro point of view.

BIOL 206 Human Anatomy Lab 0

A Prerequisite: Concurrent enrollment in BIOL 205.

A laboratory study of anatomical structures by dissection. Human body parts will be used in some aspects of the laboratory experience.

BIOL 210 Physiology 5

A Prerequisites: Successful completion of BIOL 205 and CHEM 140 or successful completion of a proficiency exam in chemistry.

A study of the functions of the human body with emphasis on physical and chemical processes.

BIOL 214 Microbiology 5

A Prerequisites: A successful completion of a college-level general biology course within the last 5 years, or successful completion of a departmental proficiency examination, and concurrent enrollment in BIOL 215.

Survey of microbiological principles as they relate to humans in health, industry, and disease. Includes methods in taxonomy, microbial cell structure and physiology and microbial genetic controls, and the distribution and control of microorganisms.

BIOL 215 Microbiology Laboratory 0

A Prerequisite: Concurrent enrollment in BIOL 214

A study of laboratory techniques including aseptic technique and cultivation and identification of microorganisms.

BIOL 218 Parasitology 5

W,Sp Prerequisite: BIOL 101 or BIOL 130

Introduction to animal parasites, including ecology, adaptation and host-parasite interactions.

BIOL 230 Principles of Genetics 5

Sp Prerequisites: BIOL 101, 120, or 130 and CHEM 121 or CHEM 140

An introduction to principles of genetics, including molecular genetics and Mendelian concepts.

BIOL 290 Pathophysiology 4

F,Sp Prerequisites: BIOL 205 & BIOL 210

Integrated approach to human disease processes. Deals with concepts of physiological function and symptoms of dysfunction which indicate alterations in the controlling mechanisms of the body.

BPRR 100 Blueprint Reading for Machine Shop 3

A Prerequisite: None

Study of orthographic third angle projection including sketching, section conventions, auxiliary views, and interpretation of fractional and decimal measurements. The study of military standards, dimensioning, welding symbols, and how they affect machine shop drawings.

BR 110, 120, 150, 160, 170 Barbering Lab 9

A Prerequisite: Completion of previous lab

Organized similar to a regular barber shop. Instruction and practice in the laboratory on hair cuts, tapering, shaving, shampooing, scalp and face massaging, tonics, hair coloring, hair analysis, razor cutting, hair straightening, hair piece fitting, hair and skin cosmetics, tricology, permanent waving, and men's hair styling. Barbering tools used as they apply in today's barber industry.

BR 111 Barbering Theory 5

A Prerequisite: None

Hygiene and good grooming, professional ethics, implements, honing and stropping, shaving, men's haircutting, mustaches and beards, shampooing and rinsing, theory of massage and facial treatments.

BR 121 Barbering Theory 5

A Prerequisite: BR 111

Bacteriology, sterilization and sanitation, the hair, anatomy and physiology, history of barbering.

BR 151 Barbering Theory 5

A Prerequisite: BR 121

Cosmetology/barber shop management, permanent waving for men, chemical hair relaxing, license laws.

BR 161 Barbering Theory 5

A Prerequisite: BR 151

Permanent waving technique for men, curling iron techniques, chemical hair processing, hair coloring, men's hair pieces and comprehensive review in preparation for State Licensing exams.

BR 171 Barbering Theory 5

A Prerequisite: BR 161

Additional class for those who have not acquired the skills or hours necessary for completion of course.

BUS 080 Business Math 3

A Prerequisite: None

Review of fundamentals of mathematics with basic business applications. Includes decimals, fractions, percentages and interest.

BUS 101 Business English 3

A Prerequisite: None

Review of grammar, punctuation, sentence structure, spelling and word usage. Development of proof-reading skills. Emphasis n the application of these principles in business correspondence.

BUS 115 Business Communication 3

A Prerequisites: BUS 101, ENG 101 with a grade of C or better

An intensive writing course with a variety of business writing assignments. Strong emphasis on letters and memos and principles of human relations as they relate to business communication. Solid background in grammar and usage required.

BUS 190 Special Projects-- Delta Epsilon Chi (DEX) 1-3

TBA Prerequisite: None

Opportunity to apply the marketing management techniques and strategies in various projects and activities. This professional organization has four basic objectives to achieve during the school year. 1) vocational understanding, 2) social intelligence, 3) civic consciousness, and 4) leadership development. (May be taken three times.)

BUS 191 Special Projects-- Phi Beta Lambda (PBL) 1

TBA Prerequisite: None

Student organization designed to develop professional business leadership skills, service project organization and implementation, and to participate in business skills events at the state and national levels.

BUS 192 Special Projects-- Toastmasters International 1

TBA Prerequisite: None

The Toastmasters Communication and Leadership course provides a practical, hands-on experience in communication skills. Members of Toastmasters are given opportunities to express themselves in front of other people. Prepared and impromptu speeches and the opportunity to progress on well charted program of public speaking.

BUS 215 Calculus for Business 4

A Prerequisite: MTH 105

The mathematics of calculus applied to business applications. Polynomial and exponential functions, mini-maxi theory, limits, derivatives, and integration.

BUS 230 Business Report Writing 3

F,W,Sp Prerequisite: BUS 115 with a grade of C or better

An intensive writing course focusing on short informational and long analytical business reports. Fundamentals of research; organizing, and interpreting information; writing and presenting short and long reports.

BUS 290 Special Topics and Conferences 3-9

TBA Prerequisite: None

Enhances individualized learning experiences to benefit student growth. Topic and learning activities to be contracted with the student and assigned instructor.

CADD 030 DOS & System Management 2 CEU's

A Prerequisite: Introduction to AutoCAD or equivalent

Explore the DOS operating system to increase your CAD system's performance and usability. Paths, subdirectories, batch files, environment variables, and set commands will be taught. System management skills will be covered to develop skills in project and data management, security, and hardware/software management and maintenance.

CADD 040 Introduction to AutoCAD 3 CEU's

A Prerequisite: Drafting experience

An overview of CAD terminology and hardware. Basic AutoCAD functions such as Draw, Edit, and Display will be taught and concepts such as hatching, dimensioning, text, and layering will be covered. The student will be able to produce simple drawings completed with dimensions and notes.

CADD 050 Drafting for Professionals 3 CEU's

A Prerequisite: CADD 040 or equivalent

An intensive course exploring AutoCAD and how it's used in drafting environments. Learn to use prototype drawings, layers, dimensions, and different drawing scales to produce working drawings. It is typically combined with Introduction AutoCAD and covers the remaining commands most often used in 2D drafting.

CADD 060 Advanced AutoCAD 3 CEU's

A Prerequisite: CADD 050

Learn to use advanced capabilities of AutoCAD such as the design of pull-down, icon, screen, and tablet menus and the creation of symbol libraries, hatch patterns and shapes. The creation of macros executed from menus and key strokes will be taught. An introduction to 3-D AutoCAD will also be covered. The student will create menus and simple Lisp routines using Edlin.

CADD 070 Using AutoLISP 3 CEU's

A Prerequisite: CADD 060 Programming experience helpful but not essential

Enables the experienced AutoCAD user to customize software to perform specialized tasks automatically and modify commands for specific applications. AutoLISP command syntax, functions and programming techniques will be discussed and appapplied practical problems. Students will write and develop programs using Edlin.

CADD 080 AutoCAD Drafting for Architects 3 CEU's

A Prerequisite: CADD 050

This course is designed to teach AutoCAD techniques used in Architectural drafting environment. Specialized commands developed for architectural uses will be covered. The student will produce complete drawings using AutoCAD and other third party software.

CADD 090 3D AutoCAD & AutoSOLIDS 3 CEU's

A Prerequisite: CADD 050

Learn advanced 3D capabilities of AutoCAD and AutoSOLIDS as you explore the fantastic world of three-dimensional modeling. AutoCAD commands that allow wire frame and surface modeling will be taught and the student will learn how to use the solid modeling techniques of AutoSolids to produce true 3D solid models. Shading and animating techniques of 3D models will be introduced.

CADD 042 Introduction to CADKEY 3 CEU's

A Prerequisites: Drafting experience

An overview of CAD terminology and hardware. Basic CADKEY functions will be taught. The student will begin to produce drawings with dimensions and notes.

CADD 044 Introduction to VERSACAD 3 CEU's

A Prerequisite: Drafting experience

An overview of CAD terminology and hardware. Basic VERSACAD functions will be taught. The student will begin to produce drawings with dimensions and notes.

CD 108 General Drafting for Electronics 3

A Prerequisite: None

Broad coverage of basic drafting techniques, electronic diagrams, symbols, charts, graphs, and printed circuit drawings.

CD 110 Engineering Drafting 3

Sp, Su Prerequisite: None

A fundamentals class in tools, lettering, dimensioning, and orthographic projections for science and engineering students.

CD 113 Drafting Fundamentals 5

A Prerequisite: None

Laboratory practice with drafting tools includes fundamentals of drafting, lettering, dimensioning and orthographic projections.

CD 124 Advanced Descriptive Geometry 5

A *Prerequisite: CD 113*

Primary and secondary auxiliaries, intersections, and developments.

CD 130 CAD Graphics Programming 3

A *Prerequisites: CIS 102 or equivalent*

Operating systems functions, programming languages, macros, and applications of design programs. Methods to best utilize CAD software systems and special features. Students will also be required to schedule three hours a week for lab time to do class assignments.

CD 133 Engineering Drawing 5

A *Prerequisite: CD 113, CD 140*

Drawings of threads and fasteners, dimensioning and tolerancing, and working drawings; detail and assembly drawings; catalog use and parts callouts.

CD 140 Drafting with AutoCAD & CADKey 3

A *Prerequisite: CD 113*

Drafting skills using CAD. Geometric construction, projection, dimensioning, and sectioning. Students will also be required to schedule three hours a week for a lab time to do class assignments. This class may be challenged by taking a placement test.

CD 208 Computer Drafting for Technology and Engineering 3

Su *Prerequisites: One of the following: AST 106, ELET 101, ELET 153, ENGR 101, or MFG 150*

A broad covering of basic drafting techniques for technology/engineering related classes.

CD 216 Mechanics and Strength of Materials 5

F,Sp *Prerequisite: MTH 106*

Basic theory of forces, force systems, section modules, shear, tension and compression; properties of materials and how they apply to design.

CD 217 Technical Illustration 3

Sp *Prerequisites: CD 113, CD 140*

The study of illustrating systems with emphasis on parallel projection including axonometric and isometric drawing. Various shading techniques will also be explored.

CD 218 Electrical and Electronic Drawing 5

W, *Prerequisite: CD 133, CD 140*

A broad analysis of drawings used in electrical and electronic industries; diagrams, schematics, printed circuits, chassis layout and industrial controls. NOTE: Credit may also be earned through Cooperative Education.

CD 219 Civil Drafting 5

Sp *Prerequisite: CD 113, CD 140*

Surface features of the earth are drawn and depicted by conventional symbols; includes subdivisions, curves and intersections, contours, natural and man-made features.
NOTE: Credit may also be earned through Cooperative Education.

CD 224 Steel Detailing 5

W *Prerequisites: CD 113, CD 140, CD 216*

Use of the AISC manual in the design of bolted and welded connections, steel beams and columns, and structural steel detailings as it pertains to the manufacturing process.

CD 226 Machine Design 5

W *Prerequisites: CD 133, CD 216*

Principles of the design of shafts, bearings, fasteners, coupling gears, cams, and frames as they apply to mechanical design.

CD 227 Steel Detailing Lab 2

W *Prerequisite: CD 133 Concurrent with CD 224*

Steel detail drawing using AISC manual and appropriate industry standards. Layout of connections and steel fabrication details in the manufacturing process.

CD 234 Manufacturing Processes 5

Sp *Prerequisite: None*

A broad analysis of materials and processes used in manufacturing as related to machine design; includes ferrous and non-ferrous metals, castings, powder metallurgy, plastics, welding and corrosion prevention. Includes manufacturing processes lab.

CD 236 Pipe Drafting 3

F *Prerequisite: CD 113, CD 140*

Specialized training in controls, symbols, fittings, parts specifications, diagrams and detail drawings as they apply to piping. NOTE: Credit may also be earned through Cooperative Education.

CD 237 Design Project 5

Sp *Prerequisites: CD 218, CD 226, CD 227*

Cooperative educational experience with a local business utilizing the skills acquired in this program to design, layout, and produce detail drawing, assembly drawings, parts lists, APT programs, and tolerance studies where applicable. If the student is unable to acquire CO-OP work situation, he/she will select a design project and be monitored by a faculty member.

CD 240 Advanced CAD Computer Graphics 5

F,Sp *Prerequisites: CD 130, CD 140*

Solutions to engineering design problems through the use of computer graphics. Development of special applications programs, parametric routines, and engineering properties of shapes. Students will also be required to schedule 5 hours per week for lab time to do class assignments. Uses AutoCAD and CADKEY.

CD 254 Geometric Dimensioning and Tolerancing 3

F *Prerequisite: CD 133*

Application of geometric symbols per ANSI Y 14.5 M--1982 to dimension machine parts for interchangeability.

CD 260 AutoCAD/CADKEY Design Systems 3

W,Sp *Prerequisite: CD 140*

Use of a CAD system in the analysis and design of three dimensional objects. Includes surfacing and solids modeling techniques. Students will also be required to schedule three hours per week for lab to do assignments. Uses AutoCAD or CADKEY.

CEE 061 Standard First Aid New material (SFA-NM) 0

TBA *Prerequisite: None*

The new American Red Cross first aid class including four hours of adult C.P.R. training rescue breathing skills and procedure for choking emergencies. The additional four hours covers common first aid emergencies and how to handle them. Taught by an authorized Red Cross instructor.

CEE 062 Life Guard Training--New material (LGT-NM) 0

TBA *Prerequisite: 15 years of age, intermediate swimming abily, must obtain a standard first aid-new material certifiction prior to the end of the course*

The new American Red Cross certification enables completers to be employed as lifeguards at aquatic facilities. Taught by an authorized Red Cross instructor.

CEE 063 Water Safety Instructor--New material (WSI-NM) 0

TBA *Prerequisite: 17 years of age, "swimmer" swimming ability, current LGT-NM or ALS or Emergency Water Safety certification*

New American Red Cross certification. Completers are eligible to teach a variety of swimming levels and skills. Taught by an authorized Red Cross Water Safety instructor-trainer.

CEE 196 Purchasing I 0-3

TBA *Prerequisite: None*

Focus on supplier development, value analysis, negotiation and communication skills, inventory control, quality improvement and legal aspects of purchasing material and services for industrial, commercial, and government organizations. *(Management degree elective.)*

CEE 198 Purchasing II 0-3

TBA *Prerequisite: Purchasing I, or five years as a buyer*

Focus on advance purchasing techniques and management. Includes management of purchasing using MBO techniques, legal aspects, contracts, blanket orders, long term agreements, cost/price analysis, negotiations, major sub contracts, learning curves, make or buy decisions. Also covered are quality performance management, problem solving, and advanced communications. *(Management degree elective.)*

CHE 210 Fundamentals of Process Engineering I 3

F *Prerequisites: CHEM 123, PHY 171, MTH 291*

Material balances, fundamentals of multicomponent phase properties and phase equilibria, numerical and graphical calculations; degrees of freedom; applications to process engineering.

CHE 211 Fundamentals of Process Engineering II 3

Sp *Prerequisites: CHE 210, CHE 260*

Energy balances and application of digital computers to process engineering calculations.

CHE 260 Thermodynamics 4

W *Prerequisites: MTH 291, PHY 173*

Properties of thermodynamic systems; energy-conversion process; emphasis on one-component, one & two-phase systems with illustrative examples.

CHEM 101 Introduction to Chemistry *(PS)* 5

A *Prerequisite: None*

Survey of general chemistry including structure, composition, properties of substance and their transformations.

CHEM 121 Principles of Chemistry I 5

F,W,Sp *Prerequisite: MTH 105 with a grade of C, or equivalent.*

Fundamentals of inorganic chemistry including such topics as atomic and molecular structure, stoichiometry, and periodic table and its use. Lab included.

CHEM 122 Principles of Chemistry II 5

W,Sp *Prerequisite: CHEM 121*

Fundamentals of inorganic chemistry including such topics as chemical bonding, solution chemistry, reaction rates, chemical equilibrium, chemical calculation, and electrochemistry. Lab included.

CHEM 123 Principles of Chemistry III 5

Sp,Su *Prerequisite: CHEM 122*

Fundamentals of general chemistry. Descriptive chemistry and quantitative/qualitative analysis. Introduction to biochemistry and organic chemistry. Application of principles introduced in Chemistry 121 and 122. Lab included.

CHEM 140 Elementary Chemistry 5

A *Prerequisites: MTH 101*

Introductory course in general inorganic chemistry primarily for nursing students and other non-chemistry majors. Lab included.

CHEM 141 Elementary Organic Chemistry 5

W,Su *Prerequisite: CHEM 140*

Introductory course in organic chemistry for non-chemistry majors. Lab included.

CHEM 142 Elementary Biochemistry 5

Sp,Su *Prerequisite: CHEM 141*

Introduction to biochemistry for non-chemistry majors. Lab included.

CHEM 231 Organic Chemistry I 5

F *Prerequisite: CHEM 121*

Basic bonding models, Lewis structures hybridization and nomenclature. An overview of the functional groups will be given followed by a detailed study of alkane, alkene, alkyne and alcohol reactions and syntheses.

CHEM 232 Organic Chemistry II 4

W *Prerequisite: CHEM 231, Concurrent with CHEM 242*

Continuation of the study of functional groups. Aldehydes, ketones, esters, ethers, aromatic compounds and cyclic compounds will be studied. Spectroscopy analysis (IR, NMR and spectroscopy) of organic compounds will also be studied.

CHEM 233 Organic Chemistry III 4

Sp *Prerequisite: CHEM 232 Concurrent with CHEM 243*

Total synthesis of organic compounds and special topics including reaction mechanisms, heterocycles, macromolecules and biomolecules.

CHEM 242 Organic Chemistry Lab 1

W *Prerequisite: Concurrent with CHEM 232*

Lab experiments in organic chemistry.

CHEM 243 Organic Chemistry Lab II 1

Sp *Prerequisite: Concurrent with CHEM 233*

Lab experiments in organic chemistry. One four hour lab per week.

CIS 102 Computer Information Systems: An Introduction 4

A *Prerequisite: None*

Introduction to computer information systems with special emphasis on how computers are used to organize information in a meaningful way in the business environment. Hands-on experience is offered. Topics include information need, process, storage, retrieval, systems, microcomputer applications for business, programming languages and computer hardware and software components. These are individual one-credit modules.

CIS 105 Logic and Problem Solving 5

A *Prerequisite: CIS 102 or equivalent*

Introduction to computer information systems logic and problem solving techniques. The course makes extensive use of structure charts and flowcharts to illustrate the logic and cover the techniques dealing with construction of subroutines, arithmetic processes, input/output procedures for both single and multiple sequential and random files, control break processing, table construction and searching techniques, file updating procedures and number systems.

CIS 110 Introduction to BASIC Programming 3

(For non-computer information systems majors)

A *Prerequisites: ACCT 101, FIN 138*

An introduction to the BASIC computer language to teach the basic ideas, concepts and terminology of computer application in business. The course will provide students with a survey of microcomputers and outline their expanding use and implications in students area of study as well as CIS. Programming assignments will be directly related to students' area of study.

CIS 111 BASIC Programming 5

F *Prerequisites: CIS 105 with grade of 3.0 or higher, OA 080 or typing speed of 35 WPM, and FIN 138*

Instruction in the basic programming language which is used to solve various business related applications. Programs are entered and executed from computer terminals or microcomputers. Programming applications include the logic concepts of control break processing, sequential file updating, table handling, sorting and data retrieval from sequential and random access files.

CIS 112 PASCAL Programming 5

A Prerequisites: CIS 105 with grade of 3.0 or higher, OA 080 or typing speed of 35 WPM and FIN 138

An introductory course in the use of PASCAL programming applications. This course will help students learn the principles of computer programming by solving business oriented problems. Topics include: problem solving, syntax and semantics, design methodology, selection, looping, procedures, parameters, data structures and arrays, data types, records and linked lists.

CIS 114 RPG Programming 5

F,Sp Prerequisite: CIS 105 or equivalent experience

Survey course in RPG programming. Covers both RPG II and RPG III concepts including headers, calculations, printing, screen formatting/updating, subfile processing, codification, etc. Emphasis on solutions to various business related problems.

CIS 115 Assembler Programming 5

Sp Prerequisite: CIS 111 or CIS 112 with grade of 3.0 or higher

An introduction to Assembler Programming designed to acquaint the student with fundamental Assembler Programming techniques. The course includes: data formats, addressing modes, instruction formats, machine cycle, assemble direction, operating system interface, arithmetic, program control mechanisms, input and output, and debugging techniques. Students will be given programming assignments to reinforce the fundamental concepts.

CIS 118 Structured Program and Systems Design Techniques 5

A Prerequisite: CIS 111 or CIS 112 with grade of 3.0 or higher

Introduction to the concepts of Structure Design. The course makes extensive use of structure charts to examine design topics including: the relationship between analysis and design, coupling, cohesion, design strategies for both batch and interactive processing, concepts involved in packaging, implementation, optimization, and management of application systems.

CIS 120 COBOL Programming 5

F,W Prerequisites: CIS 111 or CIS 112 with 3.0 Grade or higher, CIS 118, FIN 138

Instruction in COBOL programming language with an emphasis on solution of various business related problems. Course includes an introduction to COBOL programming, programming techniques, flowcharts/pseudocoding, sequence of instructions, program divisions, headings, reporting, control breaks, editing/reporting, other statements and documenting the program.

CIS 130 Business Presentations 3

A Prerequisite: None

The exploration of visual and oral communication methods focusing on professional presentation skills and their application to the field of business. A variety of methods will be explored.

CIS 135 IBM OS/Job Control Language and Utilities 5

Sp Prerequisite: CIS 111 or CIS 112 with grade of 3.0 or higher

Basic principles and fundamentals of IBM Job Control Language and Utilities for utilizing the capabilities of an IBM type computer that is using OS. Topics include: operating system and JCL, general rules and statement formats, use of input/output devices, utility programs including sort/move and instream catalogue, assignments using practical problems will be given.

CIS 140 Business Computer Applications 3

A Prerequisite: ACCT 101, CIS 102

A hands-on introduction to some of the more popular software application programs that form the basis for any business usage. Word processing, spreadsheet analysis and data base management disk operating systems applications will be covered.

CIS 141 Advanced Lotus 1-2-3 Applications 3

A Prerequisite: CIS 140

An extensive hands-on course in practical business applications of Lotus 1-2-3 and DOS. Focus on advanced spreadsheet techniques and applications relating to the various business disciplines, principle DOS utilities, efficient fixed disk management, and various add-on enhancements as they relate to Lotus 1-2-3.

CIS 145 Accountant's Use of the Computer 3

A Prerequisite: ACCT 102

A course in the practical application of the accounting process on the computer. Includes: Creation of chart of accounts, formatting the financial statements, journalizing entries on the computer, calculating and printing financial statements, journals and ledgers. Students will complete projects using general ledger, payroll, accounts payable and accounts receivable programs. Students learn to develop financial information reports for management use through the use of commercial accounting software.

CIS 150 PC Disk Operating System 3

F,W Prerequisite: CIS 102

An intense study of PC-DOS covering all internal and external commands, writing of batch files, understanding of the DOS structure and differences between PC-DOS and mainframe operating systems.

CIS 155 Extensive Use of dBase III Plus 3

A Prerequisite: CIS 102

Introduction to personal computer database software usage. Hands-on experience is offered. Planning a database system, file organization, using the "Assist" menu, understanding commands, and programming from the dot prompt. A special project is required.

CIS 165 PC Assembler Programming 3

W Prerequisite: CIS 102

An introduction to PC Assembler programming as it pertains to business oriented software to familiarize the student with fundamental business assembler programming techniques. PC architecture, service, binary math, file handler, string functions, segments, groups, arrays, and table processing and addressing modes.

CIS 185 Personal Computer Selection 3

F,W Prerequisite: CIS 102

An introduction course detailing the various basic principles to select, install and set-up a Personal Computer. The course includes the logical processes of both hardware and software.

CIS 190 Special Projects (DPMA) 1

F,W,Sp Prerequisite: None

Credit awarded for active participation in the Student Chapter of the Data Processing Management Association.

CIS 200 Computer Information Systems Cooperative Education 3-6

A Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major.

CIS 215 Computer Organization 5

W,Sp Prerequisites: CIS 111 or CIS 112 with grade of 3.0 or higher, plus one additional computer language

A fundamental course designed to explore the specific physical and functional characteristics of computer memories, central processors, peripheral processors and the interfaces between components. The computer is divided into various levels including digital logic level, micro programming level, conventional machine level, operating system level, assembly language level, and designed for the Computer Information Systems student who needs an understanding of the hardware and software and their relationships with each other.

CIS 220 Advanced COBOL Programming 5

W,Sp Prerequisite: CIS 120 with grade of 2.0 or higher

Instruction in COBOL programming language with an emphasis on solution of various business related problems. Course includes introduction to advanced COBOL programming, sequential file processing, techniques of online communications, sorting, report writer, source statement library, subprogram and overlays, and index sequential files.

CIS 240 Management Information Systems 4

F *Prerequisite: CIS 111 or 112 with 3.0 grade or higher, ACCT 101, MGT 101*

This course is to provide managers and potential managers with a technical familiarity with MIS and its capabilities, and the operational skills necessary to assist in planning and implementing a management information sytem.

CIS 260 Fundamentals of Data Base Management 5

F,W *Prerequisite: CIS 111 or CIS 112 with grade of 3.0 or higher*

An introductory course designed to familiarize the student with data base concepts. Course includes reviewing physical storage devices, batch and online programming, virtual operating systems, conventional access methods and elementary data bases. In addition, students review conceptual data base structures and the CODASYL, relational and hierarchical approaches to data base management.

CIS 270 C-Language Programming 5

F,Sp *Prerequisite: CIS 111 or CIS 112 with grade of 3.0 or higher*

An introductory course designed to familiarize the computer information systems student to C-Language Programming.

CIS 280 Business Systems Design 5

Sp *Prerequisite: CIS 220 with grade of C or higher*

Techniques of analyzing, designing, and implementing business systems using a computer. Course includes introduction to business system design, system management, preliminary investigation, detailed investigation, general design specifications, detailed design output/input, files, procedures, programming considerations, and documentation and evaluation.

CIS 299 Current Topics in Computer Information Systems 1-5

TBA *Prerequisites: Variable*

This course will vary from quarter to quarter but will present a forum where the computer information systems student will be introduced to topics of current interest and demand in the field of Computer Information Systems. Topics relevant to the CIS student will be introduced to enhance preparation for work and/or continued study in Computer Information Systems or Computer Science. A special project is required.

CJ 101 Criminal Justice 5

A *Prerequisite: None*

Purpose, function, and history of Law Enforcement Courts, and Corrections.

CJ 125 Special Studies in Law Enforcement 1-33

A *Prerequisite: None*

Special studies may be awarded for completion of P.O.S.T. certification as a Category I or II Peace Officer. This is also designed as an individual study course. The class may include such areas as corrections, probations, and research papers on key law enforcement issues. Students will design their own programs in conjunction with an instructor.

CJ 133 Criminal Law 3

A *Prerequisite: CJ 101*

Crimes and defense; historical functions, limits, purpose and functions of criminal law.

CJ 134 Criminal Investigations I 3

A *Prerequisites: ENG 101, COM 110, CJ 101*

Duties and problems of investigating officers, use of records, preparation for trial.

CJ 135 Criminalistics 3

A *Prerequisite: None*

Importance and proper identification, collection and preservation of physical evidence, laboratory techniques and services.

CJ 139 Police Traffic Services 3

Su *Prerequisite: None*

Role of law enforcement in traffic safety, particularly the background of traffic administration, traffic laws, accident investigation, officer survival skills, patrol practices, and a variety of highway related problems.

CJ 200 Criminal Justice Cooperative 3-6

A *Prerequisites: CJ 101,133,134,135, 235 or permission of instructor*

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the job and program major.

CJ 211 Introduction to Security Management 3

F,W *Prerequisite: None*

External and internal plant security, confidential personnel investigations, interviewing procedures, detection and locking devices, special commercial problems.

CJ 212 Retail Security 3

W,Sp *Prerequisite: None*

Retail functions, internal thefts, shoplifting, management, public relations, receiving, transportation storage, laws and procedures. Surveys and prevention in public and private settings.

CJ 213 Computer Security 3

F *Prerequisite: None*

Organizing for security, screening and managing personnel access control, damage control, line security, cryptography, detection and surveillance, record keeping, reliability and evaluation.

CJ 234 Criminal Investigations--II 3

Sp *Prerequisite: CJ 134 or instructor's approval*

Builds on the basic investigation techniques and procedures learned in CJ 134. Special emphasis is on the application of these skills in the investigation of serious felony offenses.

CJ 235 Laws of Evidence 3

W *Prerequisite: CJ 133 or instructor's approval*

Principles and rules of law emphasizing evidentiary problems related to criminal cases.

CJ 236 Juvenile Law and Procedure 3

W *Prerequisite: CJ 133 or instructor's approval*

A study of Utah laws, organizations and procedures dealing with youth.

CJ 239 Traffic Law 3

Sp *Prerequisite: None*

A study of state and local traffic laws, case law and enforcement policies, traffic evidence and penalties.

CJ 292 Short Course, Workshops, Institutes and Special Programs 1-6

A *Prerequisite: None*

The specific title with the credit authorized for the particular offering will appear in the quarter schedule and on the student transcript.

CL 101 Basic Computer Concepts 3

A *Prerequisite: None*

General introduction to the many uses of computers in business, industrial, academic and home environments. Elementary approach to hardware components and software concepts. Weekly hands-on computer activities.

CL 130 Microcomputer Programming In BASIC 3

A *Prerequisite: MTH 101 or equivalent*

BASIC programming language with mathematics and science applications. Taught for non-majors.

CL 131 Intermediate Microcomputer Programming 3

A *Prerequisite: None*
Similar in material to CL 130. Designed for students who have previous computer experience. To be taken in lieu of CL 130.

COK 150 Introduction to Food Service 3

TBA *Prerequisite: permission*
A background of cuisine history, the contributions of leading culinarians, and an overview of the food service industry. Types and organizations structures of food service establishments are studied. Discussions on the future trends of the industry.

COK 151 Food Service I 3

TBA *Prerequisite: Cok 150*
Fundamentals of food preparation, service procedures, sanitation and safety practices in the food service industry. Proper equipment operation. Weights and measures. Recipe conversions and basic food costing.

COK 152 Food and Beverage Service 3

TBA *Prerequisite: Cok 151*
Types of dining services; coffee shops, dining rooms, banquets, buffets. Dram Shop liability laws. Fundamentals of legal beverage service.

COK 153 Baking 3

TBA *Prerequisite: Cok 152*
Baking fundamentals. Preparation of yeast rolls, breads, pies, cakes, cookies, tarts, doughnuts, tortes, and holiday specialties. Use and care of equipment. Sanitation and hygienic work habits in conformance to health laws.

COK 154 Menu Design 3

TBA *Prerequisite: Cok 153*
Menu planning for varying numbers of people. Meeting food requirements of various types of food service operations. Principles and practices of pricing menus, ordering, conversion recipes, menu types, truth in menu regulations, standard portion requirements, principles of nutrition.

COK 155 Garde Manger I 3

TBA *Prerequisite: Cok 154*
Special garde-manger techniques in ice, salt, and tallow sculpturing. Manipulation of tools. Buffet presentation, show pieces, vegetable carving, pulled sugar.

COK 156 Purchasing Procedures 3

TBA *Prerequisite: Cok 155*
Principles and practices of purchasing food, supplies, and equipment for hotels, motels, and restaurant operations. USDA grades for fruit, vegetables, and meats. Receiving, storage, storeroom controls.

COK 157 Business Mathematics 3

TBA *Prerequisite: Cok 156*
Basic math concepts used in business. Mark-up, mark-down, discounts, simple and compound interest, payroll, depreciation, distribution and overhead, metric conversion, menu pricing, recipe adjustment.

COK 158 Supervision and Training 3

TBA *Prerequisite: Cok 157*
Techniques of supervision and training food service employees. Use of work simplification to increase efficiency in management. Styles of management and stress management. Minimum wage law.

COK 159 Nutrition 3

TBA *Prerequisite: Cok 158*
Basic food groups; their uses in meal planning, functions, and nutritional values. Current trends in eating, diet, exercise, fad diets, life cycle nutritional needs.

COK 160 Sanitation 3

TBA *Prerequisite: Cok 159*
Identification of food contamination. Food handling errors. Spoilage minimization in purchasing, receiving and storage. Preparation, cooking, serving, chilling, and reheating techniques for quality and safety. Pest control methods. Employee training and motivation. Self-inspection systems. Cleaning and sanitizing of food contact surfaces.

COK 161 Garde Manger II 3

TBA *Prerequisite: COK 160*
Advanced techniques including aspic-pates, chaud-froid, terraines, gelatines, and sauces. Manipulation of tools. Buffet table arrangement and organization.

COM 101 Elements of Basic Communication *(HU)* 3

W *Prerequisite: None*
Basic theory and practice of communication behavior, interpersonal, group problem solving and public communication situations.

COM 110 Organizational and Interpersonal Communication 3

A *Prerequisite: None*
Methods used in two-way communication with emphasis on situations occurring in business and professional environments.

COM 120 Principles of Public Speaking 4

A *Prerequisite: None*
Emphasis on the dual role of speech as both a speaking and listening skill. Practice provided through individual speeches and group discussions with emphasis on organization and delivery.

COM 122 Small Group Communication 4

Sp *Prerequisite: COM 101 or COM 110*
Basic elements of small group process with particular focus on problem solving and decision making techniques. Develops students' skills of participation and analysis in decision making groups.

COM 131 Basic Television Production 3

A *Prerequisite: COM 120 or JRN 101 with C grade or better*
Introduction to the planning, production and equipment of today's TV production video. Focus on fundamental uses of camcorders, editors, and related sound equipment.

COM 132 Television Production II 3

A *Prerequisite: COM 131*
Analysis of and practical experience in the technical aspects of television production with emphasis on lighting, audio, and editing techniques. Students will produce video for CCIN, the College TV Network.

COM 133 Television Production III 3

A *Prerequisites: COM 131, COM 132*
Advanced television production. Focus on production, camera work, and directing techniques. Students produce video for CCIN, the college TV Network.

COM 140 Beginning American Sign Language I 3

A *Prerequisite: None*
Principles, methods and techniques of communicating manually with deaf individuals. Development of expressive and receptive skills in ASL and an understanding of basic grammatical structure.

COM 141 Beginning American Sign Language II 3

F,W,Sp *Prerequisite: COM 140*
ASL II is second in a series of three courses designed to develop proficiency in ASL usage. Continues development of basic conversational skills with emphasis on reception. Particular focus on cultural awareness, grammatical features and vocabulary development.

COM 142 Beginning American Sign Language III 3

W,Sp,Su Prerequisites: COM 140, COM 141

Continues development of communicative competency in ASL. Particular focus on the shift from comprehension to production of ASL.

COM 150 Introduction to Mass Communication *(INT)* 5

A Prerequisite: None

An introductory survey course of the field of mass communication in America. This course will preview the function, performance, and structure of individual mass media and the relationships between the media and audiences and the media and government.

COM 171 Writing for the Mass Media 4

F,W,Sp Prerequisite: ENG 101 with a C grade or better

Fundamental writing course for Mass Communications including emphasis on print news, broadcast and feature magazine writing.

COM 200 Communication CO-OP Education 3-6

A Prerequisites: COM 110,120 and COM 131 or JRN 101

Supervised work experience in a business, industrial or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the job or program major.

COM 211 Introduction to Interpersonal Communication 4

F Prerequisite: COM 101 or 110

Development of student skills of listening, situational analysis and participation in various interpersonal contents through focus on the elements and processes which contribute to the formation, maintenance and termination of interpersonal relationships.

COM 213 Interviewing Principles and Practices 4

W Prerequisite: COM 101 or COM 110

Interviewing methods with emphasis on interview design and questioning techniques in business, professional and journalistic environments.

COM 220 Intermediate Public Speaking 4

Sp Prerequisite: COM 120

Techniques in developing skill in speech presentation with study and practice of persuasion in public speaking.

CONC 111 Basic Concrete 4

A Prerequisite: None

In-depth discussion of the materials used to produce Portland cement concrete: cement, admixtures, water and aggregates. Use and interrelationships of materials.

CONC 112 Concrete Production 4

TBA Prerequisite: None

How concrete is manufactured and requirements of meeting ASTM C94 specifications. Introduction to plant inspection and quality control procedures through understanding the manufacturing process.

CONC 113 Rebar Inspection 4

TBA Prerequisite: None

Identification of types of reinforcing bar and wire, minimum and standard bends, and fabrication tolerances. Material placement requirements as outlined in the ACI 318 regulations.

CONC 114 Blueprint/Plan Reading--- Commercial Projects 5

TBA Prerequisites: CONC 111 and CONC 112

Practice in reading, interpreting plans and specifications related to commercial construction projects. Emphasis on providing students with necessary skills development to correlate plans and construction.

CONC 115 Soils and Aggregates 5

TBA Prerequisite: None

In-depth study of the various types of soils and aggregates and how they are classified as construction materials. An understanding of the related specifications and testing techniques are emphasized.

CONC 116 Asphalt Construction 5

TBA Prerequisite: None

A study of asphalt and asphalt concrete production, transportation, placement, compaction, and testing. Emphasis on helping the contractor to maximize profits through understanding the product and its handling.

CONC 117 Concrete for the Contractor 4

TBA Prerequisite: None

The process for ordering and handling concrete from the contractor's point of view. Emphasis is on ordering the required product and using the best materials, methods, and equipment to maximize profits.

CONC 121 Reinforced Concrete 5

TBA Prerequisite: CONC 113

Basic principles of reinforced concrete design. Emphasis on understanding the placement of rebar to attain the best structural strength from the perspective of the inspector.

CONC 122 Concrete Mix Designs 5

TBA Prerequisite: CONC 111 (may be taken concurrently)

Properties and composition of concrete. The properties of plastic and hardened concrete plus yield calculations.

CONC 123 Pre & Post Tensioning 4

TBA Prerequisite: CONC 121

This course provides an extended discussion of cables, reinforcing placement and considerations in tensioning and concrete placement, rehabilitation & tension release.

CONC 211 Concrete Transportation 4

TBA Prerequisite: CONC 112

Methods of transporting and placing concrete. The investigation of vehicles, belts, cranes and pumps. Proper concrete consolidation and finishing techniques for various placements, curing and protection methods for both hot and cold weather application.

CONC 212 Concrete Inspector/Codes 3

TBA Prerequisites: all CONC classes lower than 212, or permission of instructor

The inspector's role, identification of typical areas of responsibility, standard approaches for accomplishing inspection tasks. Emphasis on understanding of building codes and legal requirements.

CONC 213 Field Testing of Concrete 5

Sp,Su,F Prerequisite: CONC 112

Analysis of seven basic test procedures used by field technicians to evaluate plastic concrete. The student learns how to use related equipment and gain mechanical skills for precise testing in accordance with ASTM procedures. May be used as a training vehicle for the ACI Field Technician Certification Examination.

CONC 214 Quality Control 5

TBA Prerequisite: CONC 213

Testing concrete, evaluating statistical data, and establishing procedures to ensure a quality product.

CONC 215 Concrete for the Salesperson 4

TBA Prerequisite: None

For salesmen. Basic understanding of concrete and the concrete consumer. Basics of concrete, understanding specifications necessary for successful bidding, and how to provide the customer with the product he wants and needs.

CS 276 Numerical Methods with FORTRAN 77 4
W,Sp Prerequisites: MTH 112, 291, CS 170, OIS 107
Introduction to machine computations using numerical methods and mathematical programming. Includes use of high-level FORTRAN in development of techniques for advanced mathematical analysis. Mathematical modeling techniques with particular emphasis on development of computer algorithms and simulated models related to solving problems in mechanical, civil, and electrical engineering. Laboratory experience and theory is applied in development of student project.

CS 280 Computer Architecture II 4
Sp Prerequisite: CS 243
The second course in computer architecture for computer science students. CPU structure and function, control unit operation, microprogramer control, bit-slice architectures, RISC architectures, and parallel architectures. Hardware design lab exercises are required.

CST 101 Customer Service 3
A Prerequisite: None
A course designed to meet the needs of service oriented businesses and industry. Teaches how to deal directly with the public and use time management effectively.

CST 200 Customer Service Technology Cooperative Education 3
A Prerequisite: 12 credit hours or extensive recent CST experience
A combination of in-class instruction and actual on-the-job experience for college credit and pay, constitutes the Cooperative Education concept. It is a highly successful learning strategy that provides relevant training in specific occupations.

CV 130 Statics 3
F,Sp,Su Prerequisites: MTH 112, PHY 171
Forces, moments, and couples, resultants and static equilibrium of general force systems; statically equivalent force systems, center of gravity and center of pressure; friction; free body method of analysis; applications to simple engineering problems.

CV 202 Computations & Computer Analysis 4
W,Su Prerequisites: MTH 291, CS 170
Mathematical modeling in the solution of civil engineering problems. Introduction to machine computations using numerical methods and mathematical programming. This satisfies requirements for CS 276.

CV 203 Engineering Field Measurements 4
Sp Prerequisite: None
Surveying procedures and their application to design and construction.

CV 231 Strength of Materials I 3
Sp Prerequisites: CV 130, Concurrent with MTH 113
Internal forces in members, concept of stress and strain. Hooke's Law, shear and bending moment in beams, torsion of circular bars, bending and shear stresses in beams, elementary stress resolution. Introduction to deflection in beams, introduction to column buckling.

CV 234 Dynamics I 3
W Prerequisites: CV 130, MTH 112
Position, velocity and acceleration, vector calculus, particle kinematics, kinetics of particles, including Newton's laws, conservation of momentum and energy, impact vibratory motion of particles.

CV 238 Strength of Materials Lab 3
Sp Prerequisite: CV 231
Introductory laboratory in mechanical behavior of materials using basic testing methods and instrumentation.

DNC 185 Beginning Modern Dance 1
F,W,Sp Prerequisite: None
An exploration of modern dance movement and technique to encourage the enjoyment and expression of the art of modern dance. No previous modern dance experience required. Also listed as PE 185.

DNC 186 Intermediate Modern Dance 1
W,Sp Prerequisite: DNC 185 or permission of instructor
Further exploration of modern dance movement and techniques.

DNC 195 Beginning Jazz Dance 1
A Prerequisite: None
An introduction to jazz movement and dance technique to encourage the enjoyment and expression of the art of jazz dance. No previous jazz dance experience required. Also listed as PE 195.

DNC 196 Intermediate Jazz Dance 1
A Prerequisite: DNC 195 or permission of instructor
Further exploration of jazz movement and dance techniques.

DNC 197 Advanced Jazz Dance 1
TBA Prerequisite: DNC 195 or permission of instructor
Jazz dance movement and techniques for the advanced dancer.

DS 010 Computer Awareness 1
A Prerequisite: None
Introduction to the operation of microcomputers. Items discussed include how to turn on a computer system; load, unload, and care for diskettes; and run common computer programs.

DS 020 Reading 4
A Prerequisite: None
Basic development reading program for students reading on a 10th grade level or less. Individual instruction is emphasized.

DS 025 Basic Spelling 3
A Prerequisite: None
This course is designed for those who need a review of basic spelling. It includes the study of letter combinations and sounds, correct pronunciation, spelling rules, word building, plurals, homonyms, prefixes and suffixes, and spelling demons. Computer programs will be used along with textbook materials and class lectures.

DS 050 Principles of Personal Success 3
A Prerequisite: None
A program to build successful attitudes, motivation, and goal setting in six facets of living: physical, mental, social, financial, family life, and ethical. Group discussions, movies, tapes, articles, and handouts are used.

ECD 101 Introduction to Early Childhood Education 4
F Prerequisite: None
General introduction to the field of Early Childhood Development. Observation and participation in Child Care Center Lab. Basics for the shaping of a curriculum for preschool aged children are introduced.

ECD 110 Child Growth and Development 5
F Prerequisite: None
Fundamentals of growth and development relating to effective human relationships. Study of behavior, theories of learning patterns, heredity and cultural influence from preconception through adolescence.

ECD 120 Guidance of the Young Child 3
F Prerequisite: None
Behavior and guidance principles for young children based on developmental needs. Current theories of child development. Adult role in fostering and developing the child's positive creativity. Practical application in the child care center.

ECD 121 Family Relations 5
Sp Prerequisite: None
Theories of personality, interpersonal relations, and social adjustment in various stages of the family life cycle. Emphasis on communication and adult interaction.

CONC 216 Special Studies--Specialities 4

TBA *Prerequisite: None*

A study of surface treatments, sealers, joint treatments, resurfacing, specialty concretes, grouts, mortar, and protective coatings.

COS 130, 140, 150, 160, 170 Cosmetology Lab 9

A *Prerequisite: Previous Lab*

Lab instruction and practice are an integral part of program. Shampooing scalp treatments, manicuring, hair cutting, hair styling, permanent waving, facials, massaging, tricology, care and styling of wigs and wiglets, finger waving, hair coloring and bleaching.

COS 131 Cosmetology Theory 5

A *Prerequisite: BR 121*

Hair shaping and styling, care of wigs, finger waving, manicuring, permanent waving for women, facials and makeup.

COS 141 Cosmetology Theory 5

A *Prerequisite: COS 131*

Hair coloring, skin and scalp disorders and diseases, chemistry of hair treatments and cosmetics.

COS 151 Cosmetology Theory 5

A *Prerequisite: COS 141*

Courtesy, telephone conversation, ethics, salesmanship, salon management and other topics related to practical laboratory instruction.

COS 161 Cosmetology Theory 5

A *Prerequisite: COS 151*

Review and preparation for State Board exams.

COS 171 Cosmetology Theory 5

A *Prerequisite: COS 161*

Optional, for completion of required hours

COS 190 Color 3

F,Sp *Prerequisite: COS 130*

The exploration of basic color principles in a transparent color medium (water color), followed by applications these principles in hair color, cosmetics and related cosmetology areas.

CPTT 085 Introduction to WordPerfect 0

A *Prerequisite: Minimum typing skills*

An introduction to the Word Perfect word processing software. Creating, editing and printing documents. Instruction on movement, editing, text enhancement, block functions, search & replace, help & reveal codes, error correction, and printing.

CPTT 086 Intermediate WordPerfect 0

A *Prerequisite: CPTT 085 or permission of instructor*

A continuation of CPTT 085. More advanced printing and formatting. Mail merge, data storage operations, graphics, and macros.

CPTT 098 Introduction to Lotus 1-2-3 0

A *Prerequisite: Minimum typing skills*

The uses of Lotus 1-2-3 software in business related spreadsheet applications. Data entry, edit and command modes, printing a graphics.

CPTT 099 Intermediate Lotus 1-2-3 0

A *Prerequisite: CPTT 098 or permission of instructor*

A continuation of CPTT 098. Additional commands, formulas, macros, database, advanced graphics and printing.

CS 150 PASCAL Programming 4

F,W,Sp *Prerequisite: ENGR 101*

The first course for computer science students. Algorithms, development of structures, programming techniques, introduction to files and file handling, and introduction to arrays and records. Lab work using PASCAL is required. *(Formerly listed as ENGR 102)*

CS 151 Algorithms and Data Structures 4

Sp *Prerequisite: CS 150*

The second course for computer science students. Development and analysis of algorithms, development of modular programs, data abstraction, dynamic data structures (linked lists and trees), recursion and sorting. Lab work using PASCAL is required.

CS 170 FORTRAN Programming 4

A *Prerequisites: MTH 106, CIS 101, or ENGR 101 & Concurrent with MTH 111*

Introduction to programming using the FORTRAN 77 high level programming language for mathematics, science, and engineering students. Structured programming, top-down composite structures, use of local and global data references of data files, arrays, complex variables, and data bases for scientific problem solving. One hour of supervised lab time each week.

CS 180 C Language 4

A *Prerequisite: ENGR 102 or CS 150*

Introduction to the syntax and semantics of C-program language. Arrays, strings, pointers, functions, structures, file i/o and the C preprocessor. Lab assignments designed to reinforce course concepts are required.

CS 200 Computer Science Cooperative Education 3-6

A *Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.*

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning in the program major.

CS 211 BASIC Language Applications for Engineering Math 4

F *Prerequisite: ENGR 101*

Principles of algorithm formulation and use of BASIC programming language for math, science, and engineering students including development of mathematical functions, numerical methods and manipulation of arrays in solving problems in integral and differential equations and vector calculus. Satisfies second language requirement for computer science majors.

CS 215 Assembly Language Programming 4

W *Prerequisite: CS 151 or permission of instructor*

An introduction to assembly language programming techniques. Data formats, addressing modes, instruction formats, machine cycles, input/output techniques, debugging techniques, interrupts, and assembly language to high-level language interfacing. Laboratory assignments designed to reinforce basic course concepts are required.

CS 231 Discrete Structures 4

F *Prerequisites: MTH 101, CS 151*

An introduction to discrete mathematics and algebraic structures as applied to computer science. Logic and propositions, finite sets, relations, functions, graph theory, analysis of algorithms, and state machines.

CS 243 Computer Architecture I 4

W *Prerequisites: CS 150, EE 210*

An introduction to hardware fundamentals and computer architecture, including interconnection structures, memory organization, input/output, data formats (includes the presentation of algorithms for signed and unsigned binary, and floating point arithmetic), instruction set characteristic, and an introduction to system software. Lab exercises are required.

ECD 125 Special Topics in ECD 1-2
F,W,Sp Prerequisite: Permission of instructor
Special topics in ECD. Students plan areas of study and work with instructor on individual basis.

ECD 130 Nutrition for Teachers 3
W Prerequisite: None
Study of nutrition related to the healthy growth and development of children. Menu planning, snack preparation, Federal Child Care Food Program.

ECD 131 Health, Safety and First Aid 3
F Prerequisite: None
A study of health and safety standards for children recognizing symptoms that indicate need for health care. First aid certification for State child care requirements. Discussions focus on improved personal lifestyle decisions.

ECD 142 Music for Teachers 3
F Prerequisite: None
Music and movement for children; application and use as a teaching tool. Music activities, pertinent to child's developmental level. Also listed as MUS 142.

ECD 143 Creative Learning 3
Sp Prerequisite: None
Planning creative learning activities with specific objectives related to skill levels. Students will create an activity file (art, learning, games, science and math activities).

ECD 150 Parent/Teacher Interaction 2
Sp Prerequisite: None
Working with parents and teaching effective parenting. Building communication between parent/school, parent/child by positive interactions of teacher with parents and child.

ECD 200 Cooperative Education 3
TBA Prerequisite: Permission of H&HS division chair
Applications of child development concepts and teaching methods learned in the classroom to teaching situations with young children.

ECD 210 Early Childhood Lab Experience 3
W,Sp Prerequisite: ECD 110
Teaching experience in the ECD Lab School with children ages two to five years of age.

ECD 240 Administration of Early Childhood Programs 3
Sp Prerequisite: None
Basic management principles in directing a preschool or child care program (budget, personnel, licensing, housing).

ECD 250 Art For Elementary Teachers 3
F Prerequisite: None
Theory and practice for teaching art in the elementary school. Also listed as ART 250.

ECD 255 Infant Growth and Development 3
W Prerequisite: ECD 110
An exploration of the total development of the child during the first 18 months of life. Emphasis on observation, assessment, developmentally appropriate practice, and professional infant care. Special emphasis is on research that stresses the importance of appropriate experiences for infants.

ECD 256 Toddler and Preschoolers Growth and Development 4
W Prerequisite: ECD 110 Concurrent enrollment in ECD 210 (1 hr. required)
A study of the total development of children 18 months to 5 years old. Methods of teaching preschool children. Observational, assessment and teaching skills.

ECD 257 Growth and Development of Children 6-12 3
W Prerequisite: ECD 110
The growth and development of children from 6-12 years old. Guidance principles of parenting and teaching throughout child's daily life setting. Special topics include observation, assessment, and after-school care.

ECD 260 The Exceptional Child 3
W Prerequisite: ECD 110
Introduction to various aspects of Special Education for the Exceptional Child. Class includes discussions on the gifted child; physical, social and emotional handicapping conditions, and perceptual motor deficiencies.

ECD 275 Curriculum Development 3
Sp Prerequisite: ECD 256
A study of child development concepts in relation to reaching practices. Developmental needs of children ages 1 to 6 years. Activity plans in each developmental area implemented at the child care center. Setting up an environment planned for learning.

ECD 280 Practicum Teaching 8
A Prerequisites: ECD 275 Concurrent with ECD 282
Supervised work experience to help the student apply what they have learned in the classroom to real life teaching.

ECD 282 Teaching Seminar 4
A Prerequisites: ECD 275 Concurrent enrollment in ECD 280
Understanding child development concepts and how they apply to teaching young children. Individualized training plans are designed to help students build teaching competencies.

ECN 105 Survey of Economics--A Social Science Overview 5
A Prerequisite: None
The study of societies' provisioning, from tradition and command systems of antiquity through the rise of market systems. Includes examination of principles of capitalism and major modifications of market systems in modern times.

ECN 135 Labor Economics 3
F,W,Sp Prerequisite: ECN 105 or permission of instructor.
American free-enterprise system, labor market economics, wage theory, labor mobility, human resource development, history and role of labor unions, collective bargaining, employment of public policy.

ECN 140 Economic History of the American Labor Movement 4
Sp Prerequisites: HIS 120/121 or HIS 170
A survey of the origins and historical development of labor unions and the labor movement in America from colonial times to the present. Topics covered will include the origins of the American working class; the formation of early, colonial, trade unions; the rise of the Robber Barons; the formation of the AFL; industrial conflicts; the Great Depression; the formation of the CIO; and the recent labor union movement in the public sector.

ECN 201 Macro Economics 4
A Prerequisite: MGT 101
A global approach to the economy dealing primarily with aggregate economic data, national income statistics, labor force, full employment, and price level (inflation). Simple models used to develop a basic understanding of income and monetary theories.

ECN 202 Micro Economics 4
A Prerequisite: MGT 101
The study of individual decision making units analyzing efficient or optimal allocation of resources (land, Labor and capital) through the market system of supply and demand. Emphasis on logic and decision making by individual firms and households in relation to the circular flow of economic activity.

EDU 195 Introductory Field Experiences 1

W Prerequisite: ECD 110 Concurrent enrollment in EDU 210

An exploratory experience as an observer/aide in both elementary and secondary public school settings. Designed to assist career planning. Minimum of three hours per week of school visitation. Orientation to teacher education included.

EDU 210 Introduction to Education 3

W Prerequisite: ECD 110 Concurrent enrollment in EDU 195

Discussion of the attributes of an effective and professional teacher. Education as a career field, general organization of American Education, and roles of various professionals engaged in education.

EDU 211 Social Studies Concepts for Elementary Teachers 4

Sp Prerequisite: None

Fundamental concepts from the social studies curriculum.

EDU 233 Science Concepts for Elementary Teachers 4

Sp Prerequisite: EDU 210

A survey of general science concepts taught in the elementary school.

EDU 263 Instructional Media for Teachers 3

Sp Prerequisite: EDU 210

The class will introduce students to media production, equipment operation, the use of computers in education, and materials management.

EDU 270 Educational Psychology 3

Sp Prerequisite: Concurrent with EDU 210

This course presents lesson planning and teaching principles as they relate to the education of elementary children.

EE 107 Electronics & Instrumentation 5

Sp Prerequisites: MTH 292, PHY 172 (for non-electrical engineering students)

Fundamentals of voltage, current, resistance, capacitance, inductance, and basic AC/DC circuits, semiconductors and introduction to LSI, logic elements, amplifiers, and digital systems. Basic laboratory instruments. Lab included.

EE 210 Introduction to Digital Systems 4

F,Sp,Su Prerequisite: MTH 105

Number systems, Boolean algebra, simplification of logic functions, combinational and sequential circuits, Karnaugh maps, state tables, and finite state machines. Provides design theory and applications. Includes 2 hours of supervised lab each week.

EE 221 Introduction to Electric Circuits 5

F Prerequisites: PHY 172, Concurrent with MTH 291 and EE 233

Electronic circuit variables and parameters; writing and solving electric circuit equations. Thevenin's and Norton's theory. Transient and steady state analysis of circuits. Lab included.

EE 222 Electric Circuits 5

W Prerequisites: EE 221, 233

Advanced network techniques including transformer and superposition methods, frequency response, and Fourier series techniques, coupled circuits and polyphase circuits. Lab included.

EE 230 Engineering Electronics 5

Sp Prerequisites: EE 221, 233

Physical and electrical properties of PN junction; modeling of small and large signal behavior of bipolar and MOS transistors; design methodology for amplifiers. Lab included.

EE 233 Electronic Measurement 2

F Prerequisites: Concurrent with EE 221

Use of standard electronic test equipment for measurement and testing, including multimeters, oscilloscopes, signal generators, and basic device testers. Investigates measurement errors resulting from loading and frequency effects. Introduces automated data gathering using engineering software to interface computers to oscilloscopes and other test equipment.

EE 261 Electronic Properties of Solids 3

W Prerequisites: EE 221, CHEM 122, PHY 173

The physics of solid state materials, semiconductor device physics and fabrication of semiconductor devices including silicon integrated circuits, superconducting magnetic and dielectronic materials.

ELC 110 Principles of Technology I 4

W Prerequisite: None

A carefully integrated hands-on physics course. Includes general physics topics which emphasize practical and lab applications. Offered to vocational/technical students.

ELC 113 Basic Electricity 5

F,W,Sp Prerequisite: Concurrent with ELC 147 or IND 147.

Theory and lab practice of atom, conductor, electrostatics, conduction in liquids, chemical energy, Ohm's/Kirchoff's laws, power, circuit sizing, magnetism, magnetic circuits, meters, sources of electricity. DC generators/motors, electronics, and the algebraic solution of practical problems.

ELC 116 Residential Wiring 4

F,W,Sp Prerequisite: Concurrent with ELC 117

Safety, tools, blueprints, materials and laboratory/project wiring techniques of splicing, wire connections, NM cable circuits, metal/plastic boxes, switching, power/receptacles, lighting, signal/security systems, low voltage remote control systems and service cables/equipment.

ELC 117 Electrical Codes, Residential and Commercial 4

F,W,Sp Prerequisite: Concurrent with ELC 116

National Electrical Code for single/multiple family residences, commercial locations, stores, mobile homes, recreational vehicles and swimming pools. Relationship of the National Code to local ordinances/codes.

ELC 123 Advanced AC Electricity 5

W,Sp,Su Prerequisites: ELC 113, Concurrent with ELC 148

Theory and lab practice of AC basic single/three-phase power systems, alternators, motors, inductance, transformers/connections, capacitance, reactance, impedance, resonance, power factor and the solution of practical problems using trigonometry and algebra.

ELC 127 Electrical Codes, Industrial and Hazardous 4

Sp,Su Prerequisite: ELC 117

National Electrical Code for industrial locations, transformers, motors, x-ray units, welders, restaurants, classes of hazardous locations, garages, service stations, medical and assembly locations, and other such locations..

ELC 128 Electric Devices & Trans. Lab 4

W,Sp,Su Prerequisite: Concurrent with ELC 123

Laboratory trouble shooting, repairing, connecting DC/AC single/three-phase motors, transformer connections and introduction to basic industrial maintenance.

ELC 133 Magnetic Control 5

F,Sp,Su Prerequisite: None

Principles, equipment and theoretical techniques of diagramming/analysis/development of practical magnetic motor and refrigeration electrical control systems. Logic math concepts will be taught.

ELC 139 Motor and Refrigeration Controls 3
F,Sp,Su Prerequisite: Concurrent with ELC 133
The equipment, laboratory development, installation, trouble shooting and maintenance of practical magnetic motor and refrigeration electrical control systems.

ELC 140 Introduction to Solid State Control Lab 2
F,Sp,Su Prerequisite: ELC 133
The equipment connection and trouble shooting of logic circuits and introduction to solid state control systems. Logic math concepts will be taught.

ELC 147 Mathematics for Basic Electricity 5
F,W,Sp Prerequisite: None
Basic algebra as it applies to electricity, fractions, powers, use of calculator, roots, areas, volumes, applications of algebraic equations.

ELC 148 Math for AC Electricity 5
W,Sp,Su Prerequisite: ELC 147
Use of calculator, AC applications of basic algebraic equations. Elementary trigonometry, graphing, functions, right triangles, phasors with electrical identification and polar/rectangular conversions.

ELC 200 Electricity Cooperative Education 3-12
A Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.
Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major.

ELC 211 Technical Report Development 4
F,Su Prerequisite: None
A group seminar providing interaction between students and the solution of instructor-approved problems or projects in the electrical field.

ELC 213 Commercial/Industrial Electrical Principles 5
F,Su Prerequisite: ELC 123
Principles of lighting, heating and power for commercial/industrial locations, three-phase transformers/connections/vaults, WYE/DELTA Systems, and switch gear.

ELC 214 Commercial/Industrial Wiring and Maintenance Lab 5
F,Su Prerequisites: ELC 139 and 213
Safety, tools, materials, construction and laboratory wiring techniques of lighting, heating, and power for commercial/industrial locations. Includes installation, trouble shooting and maintenance of motors, controls, transformers, switch gear conduit and circuit wires.

ELC 221 Industrial Electronics 5
W Prerequisite: ELC 113
Introduction to electronic theory, vacuum tubes, diodes, zener, LED, thyratrons, thyristors, SCR, diacs, triacs, SCS, transistors, NPN/PNP/UJT/FET, linear/digital integrated circuits, compound logic gates and power supplies as applied to electronic/microprocessor industrial control circuits.

ELC 226 Programmable Controllers 2
W Prerequisites: ELC 133, ELC 227 (evenings only)
Theoretical preparation for lab ELC 229. Basic techniques of layout and development of circuits and diagrams for lab projects. Basic principles of programming and utilizing solid state motor control apparatus.

ELC 227 Electronic Circuits 2
W Prerequisites: ELC 113
Theoretical preparation for lab 230 Basic techniques of reading/sketching diagrams and layout/development of circuits for lab projects.

ELC 229 Programmable Controls Lab 3
W Prerequisites: ELC 140, ELC 227
Use of solid state motor control apparatus with emphasis on Programmable Controllers. Includes installation, programming and trouble shooting in a simulated industrial environment.

ELC 230 Electronic Projects 2
W Prerequisites: ELC 113, ELC 221, ELC 226
Laboratory introduction to industrial electronic test equipment and breadboard circuit wiring, soldering and maintenance. Programming and use of industrial robots.

ELC 231 Seminar 1
Sp Prerequisite: None
A group seminar providing interaction between students and industry with manufacturer representatives.

ELC 232 Automation Lab 5
Sp Prerequisites: ELC 226, ELC 230, ELC 235
Solar heating, environmental, energy efficiency and laboratory application of electric, electronic, pneumatic and hydraulic instrumentation to process control systems. Introduction to industrial robots.

ELC 233 Introduction to Robotics 4
Sp Prerequisites: ELC 226
Basic theoretical concepts of robotics.

ELC 235 Industrial Instrumentation 5
Sp Prerequisites: ELC 145, ELC 221
The theory of electric/pneumatic/hydraulic instrumentation, introduction to microprocessors and techniques for environmental and process control.

ELC 241 Process Control Theory 3
Sp, Su Prerequisite: ELC 235
Principles of Cascade control, feed forward vs. feedback, data highways (coaxial, fiber-optic), environmental systems (VAV, chilled/heated water, building static-pressure), piping and fittings used in chemical processes.

ELC 242 Process Control Lab 4
Sp, Su Prerequisite: ELC 241
Trouble-shooting/calibration of PID cascaded control loops, PV transmitters and converters (4-20mA/3-15psi/1-5 volt 0-volts), documentation, repair/installation/maintain/lubrication of: valves, compressors, pumps, tubing, piping, fittings. Application of safety practices.

ELC 243 Plant & Industry Codes/Standards 3
Sp, Su Prerequisite: ELC 235
Federal, industry, or plant codes, MSA, ISA, ANSI, ASTM, ASME, OSHA.

ELC 245 Isometric & Vendor Literature 3
Sp, Su Prerequisite: ELC 235
Comprehending isometric drawings relating to piping, and control system layout, relating theory to actual hardware through the use of vendor literature.

ELC 251 Specialization Lab 1
Sp Prerequisite: must be taken in the sixth quarter
A special projects laboratory/workshop where students work independently under supervised conditions to develop a project of interest and present it to the class.

ELC 299 Special Studies in Electricity 1-5
F,W,Sp Prerequisite: permission of instructor
An opportunity to pursue advanced or special studies in a particular area of interest. Credit hours, subject, and course of study determined before registration by consultation and written agreement between instructor and student. A maximum of five credit hours may be used toward diploma or degree.

ELET 101 Basic Electronics (DC) [Evening Program Only] 6

A *Prerequisite: None*

Development of basic electronics theory, units of measure, Ohm's Law, Kirchoff's Laws, series circuits, parallel circuits, combination circuits, and the use of devices for measurements in laboratory experiments.

ELET 102 Basic Electronics (AC) [Evening Program Only] 6

A *Prerequisite: None*

Fundamentals of magnetism, RC & LR time constants, resonance, decibels, resistors, capacitors, and inductors, and the use of devices for measurements in laboratory experiments. Operation and use of electronic devices to measure resistance, voltage, and current in electronic circuits; operational techniques and use of the multimeter, oscilloscope, signal generator and other basic test equipment; experimental verification of basic electronic theory in passive circuits; soldering techniques. Includes two hour lab.

ELET 103 Basic AC & DC Theory [Day Program Only] 12

A *Prerequisite: Concurrent with ELET 101 high school algebra satisfactory score on ASSET test*

Development of basic electronics theory, units of measure, Ohm's Law, Kirchoff's Laws, series circuits, parallel circuits, combination circuits, and the use of devices for measurements in laboratory experiments. Fundamentals of magnetism, RC & LR time constants, resonance, decibels, resistors, capacitors, and inductors, and the use of devices for measurements in laboratory experiments. Operation and use of electronic devices to measure resistance, voltage, and current in electronic circuits; operational techniques and use of the multimeter, oscilloscope, signal generator and other basic test equipment; experimental verification of basic electronic theory in passive circuits; soldering techniques. Includes two hour lab.

ELET 104 Technical BASIC 3

A *Prerequisites: None*

Computer BASIC programming language applied to various mathematical and electronic problems. Students develop proficiency in writing practical and useful programs for solving electronic and mathematical problems.

ELET 105 Basic Electronics Math 5

A *Prerequisites: High school algebra. Satisfactory score on ASSET test*

A functional introduction to algebra, right angle trigonometry, factoring and special products, fractions and fractional equations, complex numbers, natural and common logarithms, polar and rectangular conversion.

ELET 106 Advanced Electronics Math 5

A *Prerequisite: ELET 105, or MTH 105, with C grade or better*

Functions, graphs, graphical solutions to electronic circuitry, quadratic equations, systems of equations, matrices, determinants, circular functions, trigonometric equations, trigonometric identities, circuit solutions with trigonometry and algebra, and inequalities.

ELET 107 Calculus I (for Electronics) 5

A *Prerequisite: ELET 106 or MTH 106*

Electronic applications to differential and integral calculus, rates, limits, derivatives, definite and indefinite integrals, maxima and minima, trigonometric functions, logarithmic and exponential functions, introduction to differential equations.

ELET 110 Active Devices 6

A *Prerequisite: ELET 101, ELET 102, or ELET 103*

Fundamentals of active devices--diodes, bipolar junction and field effect transistors, thyristor family, ASND optoelectronic family. Biasing techniques, basic amplifier classes and configurations, and the theory of unregulated power supplies.

ELET 120 Linear Circuits I 6

A *Prerequisite: ELET 110*

Large and small signal amplifier characteristics. Study of RF, wide band, tuned, audio, and power amplifiers. Basic operational amplifier circuits and application of the various operations employing laboratory experiments.

ELET 121 Linear Circuits II 6

A *Prerequisite: ELET 120, ELET 106 or MTH 106*

The study of sinusoidal oscillators, including LC & RC circuits. Non-sinusoidal oscillators, including multivibrators, function generators, and blocking oscillators. Analysis of switching and linear power supply regulators active filter analysis, and special circuits and applications using the 555 timer and 565 phase lock loop circuits.

ELET 130 Digital Circuits I 6

A *Prerequisite: ELET 110--for AST students, AST 106*

Basic theory of digital circuits. Number systems and binary codes, Boolean algebra, analysis of logic gates, and combinational logic. Mechanization and debugging of laboratory devices.

ELET 131 Digital Circuits II 6

A *Prerequisite: ELET 130*

Sequential logic circuits, registers, D/A and A/D conversion, RAM/ROM, DOS, microprocessors, microcomputers and interfaces. Design of various sequential logic circuits, and machine language programming using logic trainers and microcomputer trainers for mechanization and debugging.

ELET 140 Communications I 6

A *Prerequisite: ELET 120*

The functional concepts and requirements for AM, SSB, FM and digital communications systems. Also, a block diagram analysis of TV and digital communications systems. The mechanization, testing, troubleshooting and employing of associated laboratory experiments.

ELET 200 Cooperative Education V

A *Prerequisite: permission of the Director of Cooperative Education or a member of his staff*

Cooperative Education credit may be earned in lieu of some of the laboratory work for completion of the AAS degree requirements. Also a unique CO-OP program is available with several government facilities. After successful completion of the first year of the Electronic Technology Program, and prior to starting the sixth (final) quarter, students who apply and are accepted will work in paid CO-OP pposition srelated to Electronic Systems with opportunities for career employment after graduation. There is also a program for students wishing to specialize in Medical Instrumentation to satisfy the requirements of ELET 260, 261 through CO-OP. Students interested in CO-OP who have completed all elective work must enroll for at least one credit of CO-OP to obtain CO-OP positions not requiring the two quarter limitations.

ELET 220 Advanced Measurements 6

A *Prerequisite: ELET 121*

The theory and practice of making accurate electrical measurements and calibrations. Includes statistical approaches to the measurement and analysis of signal and noise values, bridges, meters, oscilloscopes, and other indicating devices and equipment, and the calibration and standardization of various test equipment, signal generators, wave analyzers, etc. Includes lab.

ELET 230 Computer Systems I 6

A *Prerequisite: ELET 210, ELET 131*

Concepts of the basic microcomputer system architecture, 8080/8085 microprocessor architecture, machine language and assembly language programming of the 8080/8085, system debugging and troubleshooting employing a logic analyzer with interface trainers employed to require both hardware and software combinations to achieve various system control and feedback functions.

ELET 231 Computer Systems II 6
A *Prerequisite: ELET 230*
Dedicated to the control applications of computer automation: CNC, robotic arms, industrial control, pneumatics, hydraulics, and associated control system theories. Also, digital and analog controllers and some advanced software and programming languages.

ELET 240 Communications II 6
A *Prerequisite: ELET 140*
The theory and operations of AM, SSB, FM and digital communications devices. The study of antenna systems, RF propagation, and environmental effect on communications, with associated laboratory experiments.

ELET 241 Microwave Communications 6
F,Sp *Prerequisite: ELET 210*
Principles of microwave oscillators, waveguides, and antenna with application to audio, visual, and data transmission; solid state microwave devices, and the testing and analysis of basic microwave systems; operation of test equipment, calibration, and adjustment procedures peculiar to microwave devices.

ELET 242 TV Systems I 6
W,Su *Prerequisite: ELET 210*
Principles of how active and passive circuits, devices and networks are integrated into monochrome and color television systems; a close look at the modulation, transmission, and receiver requirements. A step by step approach to systematic lab analysis and troubleshooting.

ELET 243 TV Systems II 6
W,Su *Prerequisite: ELET 210*
A complete examination of specific TV receiver circuits with emphasis on theory of operation and actual "set" performance. Systematic lab analysis and trouble shooting with the latest state of the art equipment and methods. Includes supervised adjustments and repairs.

ELET 244 VCR Systems 6
F,Sp *Prerequisite: ELET 243*
An in-depth study of VCR's including a review of video basic principles and VCR theory of operation. This course includes adjustment and alignment of tapes, troubleshooting to component level, parts replacement of surface mount components, actual VCR repair and introduction to 8 mm format and camcorders.

ELET 245 Laser/Fiber Optics 6
W,Su *Prerequisite: Permission of AST instructor*
A continuation of physics principles as applied to fiber optic systems. Includes energy transfer, lasers, detectors, fiber optics and laboratory applications.

ELET 250 Instrumentation Fundamentals 6
W *Prerequisite: ELET 140*
Theory and practice of measuring, processing, transmitting, storing, and displaying the measurements of various physical phenomena as encountered in manufacturing plant environments, hazardous environments, and test environments such as in automotive, flight, and space test vehicles. Includes transducers, signal conditioning circuits, data transmission, telemetry, data storage, and data display systems. Includes lab.

ELET 251 Feedback Control Systems 6
F,Sp *Prerequisite: ELET 121*
A study of the theory, analysis, and design considerations of closed-loop feedback control systems as are encountered in plant control systems, robotics, aircraft flight controls, etc. Proportional, integral, and derivative control techniques are examined. Course addresses sensing devices, forward and feedback path control elements, final control elements, and controlled system characteristics. Also included are the classical analysis and design techniques of Laplace transforms, Bode plots, and various stability criteria. Digital control systems are introduced. Includes lab.

ELET 260 Medical Instrumentation I 6
F,Su *Prerequisite: ELT 210, Concurrent with ELET 262*
A study of the instrumentation of living organisms. Circuit analysis of ECG monitors, strip chart recorders, rate meters, lung capacity computers, and hospital safety monitors. Hospital safety and equipment alignment and troubleshooting are stressed. Field trips to various medical centers.

ELET 261 Medical Instrumentation II 6
F,Sp *Prerequisite: ELET 260*
A study of coronary care systems and equipment: defibrillators, pace makers, ultrasound systems, x-ray and MRI systems, and scaling and scanning systems.

ELET 262 Applied Physiology 3
F,Su *Prerequisite: ELET 210 Concurrent with ELET 260*
Familiarization with functional systems of the body with emphasis on those most adaptable to monitoring by electronic instrumentation.

ELET 270 Consumer Electronics Servicing 6
F,Sp *Prerequisite: ELET 243*
Principles of operation and servicing of consumer electronic equipment including AM/FM stereo music systems, CB two-way radios, telephone systems, PA systems, and others. Emphasis is on servicing and preparing the student to work in electronic repair shops. Laboratory problems include repair and alignment of actual systems with typical problems.

ELET 290 Special Topics in Electronics 6
A *Prerequisite: must be taken last quarter in the ELET program*
An investigative analysis of new concepts and techniques being employed in electronics. The course will change from year to year allowing the student to keep abreast of the changes in technology.

ENG 015 Basic Writing 4
A *Prerequisite: None*
A course in basic writing skills. Covers basic spelling, writing complete sentences, organizing sentences in logical order, and basic language usage. Individualized, self-paced, and taught at various levels.

ENG 020 Sentence Writing 4
A *Prerequisite: Permission of instructor or placement by the English Placement essay in ENG 020, 099, or 101. Open entry for the first two weeks of the quarter.*
Program provides additional help in writing sentences. Covers fragment and run-on sentences, comma splice, and related punctuation. Individualized for students who need help in preparing for entry into ENG 099. Instructor approval required for registration.

ENG 099 Preparatory English Composition 4
A *Prerequisite: Pre-test required*
Basic principles of effective composition with emphasis on sentence and paragraph development.

ENG 101 English Composition 4
A *Prerequisites: ENG 099 with a C grade or better or equivalent skills as determined by a pre-test.*
Basic principles of effective composition with practice in expressing ideas through essay writing.

ENG 102 English Composition 4
A *Prerequisite: ENG 101 with a C grade or better.*
Continuation of composition and expository writing with special emphasis on the principles of logic and writing of research papers.

ENG 103 English Composition 3
Sp *Prerequisite: ENG 101 with C grade or better.*
Advanced writing concepts based on either an expository or creative tract. Students must write an article for a journal or magazine.

ENG 120 Introduction to the Study of Language 3

W,Sp *Prerequisite: ENG 101*

A look at the roots of the English language, its growth and its modern oral and written characteristics. The class attempts to give the students a scientific view of language through use of logical linguistic tools.

ENG 125 Special Studies in English 1-2

F,W,Sp *Prerequisites: ENG 101 with a C grade or better. Permission of instructor required.*

Designed as an individual study course. The class may include such areas as communications, listening skills, composition, research papers, literature, personal writing, letters, spelling, grammar, job seeking skills, etc. Students registering for ENG 125 will design their own programs in conjunction with an instructor.

ENG 130 Technical Writing 4

A *Prerequisite: ENG 101 with a C grade or better.*

Introduction to technical writing. Includes study of practical work in style, language and mechanics of technical reports.

ENG 200 English Cooperative Education 3-4

A *Prerequisite: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education, or a member of his staff.*

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the job and the program major.

ENG 245 Introduction to Imaginative Writing 4

F,W,Sp *Prerequisite: None*

Introductory course covering various types of creative writing. Course content includes revision workshops.

ENG 250 Introduction to Literature *(HU)* 5

W,Sp *Prerequisite: ENG 101 with a C grade or better.*

An examination of fiction, poetry and drama, with special attention to traditional forms. Students are guided through critical reading and evaluation of literary forms.

ENG 252 Nineteenth Century American Literature 3

W *Prerequisite: ENG 101 with a C grade or better.*

Survey of major American writers and literary movements from the early to late 19th Century.

ENG 253 Modern American Literature 3

F,W,Sp *Prerequisite: ENG 101 with a C grade or better.*

Survey of major American writers and literary movements from the early 20th Century to present.

ENG 261 Nineteenth Century British Literature 3

W *Prerequisite: ENG 101 with C grade or better.*

A general survey of major British writers and literary movements from the early to the late 19th Century, including Wordsworth and Stevenson.

ENG 262 Modern British Literature 3

Sp *Prerequisite: ENG 101 with C grade or better.*

A general survey of major British writers and literary movements from the late 19th Century to the present, beginning with Wells.

ENG 270 The American West in Literature 3

Sp *Prerequisites: ENG 101 with a C grade or better*

Examines the background of American West fiction and poetry in comparison with other regional literatures. Explores the influences of western landscape and small populations on the style and product of American West novelists.

ENG 271 Introduction to Great Women Writers 3

Sp *Prerequisite: ENG 101 with C grade or better.*

Examines work by and about women in their traditional and non-traditional roles.

ENG 272 Children's Literature 3

Sp *Prerequisites: ENG 101 with C grade or better.*

An introduction to prose and poetry designed for children. Emphasis is on theory, history, types, analysis, and practical application of literature for children.

ENG 276 Introduction to Native American Literature 5

W *Prerequisites: ENG 101 with C grade or better.*

Introduction to literature written by Native Americans. Oral narratives, autobiographies, poetry, short stories, and novels.

ENGR 101 Introduction to Engineering I 3

F,W *Prerequisites: CL 101 or equivalent, MTH 106 as co-requisite*

Introduction to Engineering as a profession, ethics, safety, career opportunities, problem solving using computers, graphics, and applied engineering concepts.

ENGR 103 Introduction to Engineering III 4

Sp,Su *Prerequisite: High School drafting or CD 110*

Introduction to spatial problem solving techniques. Includes sketching, manual drafting, CAD and research project.

ENGR 200 Engineering Cooperative Education 3-6

A *Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.*

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning in the program major.

ESL 101 Grammar, Listening, Speaking for ESL 7

A *Prerequisite: Michigan Test*

A basic review of the English verb tenses system. Development of classroom listening and speaking skills. Individual instruction is emphasized.

ESL 102 Writing for ESL 4

A *Prerequisite: Michigan Test*

A course in basic writing skills with emphasis on the special difficulties of non-native speakers of English. Review of verb tenses, sentence structure, spelling, punctuation, and idiomatic expressions. Individualized instruction based on each student's needs.

ESL 103 Reading for ESL 4

A *Prerequisite: Michigan Test*

Development of college-level textbook reading skills. Individualized readings in the student's proposed field of specialization is a major part of the class. Students learn how to read faster, with better understanding, and with better recollection.

FA 110 Art Appreciation *(HU)* 3

F *Prerequisite: None*

Introduction to visual arts. Leads the student through an awareness of conception, creation and evaluation of the major art forms. *(Also listed as HU 110)*

FA 125 Special Studies in Fine Arts 1-2

TBA *Prerequisite: Permission of instructor*

Special topics in Fine Arts. Students will plan their areas of study and work with the instructor on an individualized basis.

FDMM 101 Introduction to the Fashion Business 3
F,W,Sp Prerequisite: None
Study of fashion diffusion theory and the components of the apparel industry including textile production, apparel manufacturing, and retailing. Topical issues such as imports and off-shore production will be discussed. *(Similar course in production, manufacturing, and retailing components of furnishings industry).*

FDMM 102 Textiles 3
F,W,Sp Prerequisite: None
Study of properties, production, and use of the textiles that are basic in apparel and household products. Includes man-made and natural fibers, yarns, fabric construction, and finishes. *(Course addresses needs for both clothing and furnishings) [Interior Design Elective]*

FDMM 103 Dressing for Fashion Success 3
F,W,Sp Prerequisite: None
Examines the formal and symbolic aesthetic approaches to fashion. Includes the elements and principles of design as they are applied to clothing and the human body. Special attention is given to creating optical illusions and use of color. *(Similar course in furnishings area or incorporate space and placement of objects in this course)*

FDMM 201 History of Fashion 3
F,W Prerequisite: None
An historic and ethnographic study of fashion in Western history and in other cultures. Based on the premises that (1) fashion is an expression of a particular time or place, (2) other times and places are a source of fashion inspiration, and (3) fashion is cyclic and the historic imprint can be used to predict fashion changes.

FDMM 202 Fashion and Human Behavior 3
F,W Prerequisite: None
Study of how fashion is shaped by the values and attitudes of consumers and the importance of personal appearance in human interactions. Examines these issues from the social and psychological points of view.

FDMM 203 Problem Solving in Fashion Merchandising 3
W,Sp Prerequisite: FDMM 101
Case studies in fashion markets that develop problem solving ability and an awareness of the on-the-job issues and problems.

FDMM 204 Fashion Display &Color Coordination 3
F,W,Sp Prerequisite: None
An introduction to visual merchandising with emphasis on design and color coordination. Course will focus on window display, interior display and counter and shadow box display.

FDMM 205 Fashion Illustration 3
W,Sp Prerequisite: None
Line drawings of fashion figures; principles of fashion design as used in newspapers, fashion magazines, and other advertising.

FDMM 206 Flat Pattern Design and Fitting 3
F,W,Sp Prerequisite: None
The construction of paper patterns from basic body measurements then alter the basic design by creating sleeve, collar, bodice, skirt and pant variations. Custom fitting problems and solutions. Students must have access to a sewing machine.

FIN 120 Personal Finance 4
A Prerequisite: None
Principles and skills necessary for individual and family financial growth including: financial planning and goal setting, spending and budgeting, adequacy of insurance, investments, borrowing and banking, savings programs, home and automobile purchases, taxes, and estate planning.

FIN 121 Principles of Banking 3
F,W,Sp Prerequisite: None
An introduction to banking. Includes the evolution of American Banking, the documents and language of banking, the deposit function, credit function, and payments function, loans and investments and the concepts of liquidity, safety, and income, bank accounting, pricing and profitability, regulation and examination of banks, personnel and security, trust department and other bank services, and the current competitive environment.

FIN 138 Financial Mathematics 5
A Prerequisite: BUS 080 with grade of C or higher or equivalent skills determined by examination.
A study of financial mathematics applications in business. Topics include percentages, financial statement analysis, simple interest, and discounts, annuities, sinking funds and amortization, consumer credit, and insurance. Financial calculator required.

FIN 200 Finance & Credit Cooperative Education 3-6
A Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.
Supervised work experience in business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the job and the program major.

FIN 203 Managerial Finance 5
F Prerequisites: ACCT 102, CIS 140
Financial statement analysis, operating and financial leverage, break-even analysis, working capital and financial design, current asset management, short and long-term financing, time value of money, long-term debt and lease financing. Instruction includes the solution to course problems using a spreadsheet application program on microcomputers.

FIN 204 Money and Banking 5
W Prerequisites: ECN 201, MGT 101
Introduction to contemporary practices, policies, and issues relating to the monetary economy. Includes the U.S. financial system, new measures of the monetary aggregates, the provisions of important new legislation, federal reserve policy, the monetary base and the money multiplier, international transactions, the Monetarist-Keynesian controversy, and the problem of inflation.

FIN 210 Investments 4
F,Sp Prerequisites: FIN 120, FIN 138, MGT 101
An introduction to both the process of investing and the wide range of investment vehicles available to individual investors, while taking into account the major changes during the past decade. Techniques, vehicles, and strategies for implementing investment goals in light of risk-return trade-offs. Assessing one's financial position, establishing personal financial goals, considering insurance and retirement needs, and recognizing tax factors related to investment plans.

FIN 220 Personal Financial Planning 4
Sp Prerequisite: FIN 120
An action-oriented approach to personal financial decision-making procedures. Basic principles of personal financial planning, cash budgets, tax reforms, management of assets and debts, insurance planning (life, health, property and liability), major investment vehicles, retirement and estate planning. Emphasis on real-life cases and changes in the institutions, instruments, and techniques of personal financial planning.

FIN 221 Credit and Collections 3
A Prerequisites: ACCT 101, MGT 101
Industrial and consumer credit management. Introduction to credit management, developing credit information, financial statement analysis, credit decision making, collections, credit reports, credit department organization, consumer credit, consumer credit decisions, consumer collection policies and practices, and government regulation of consumer credit.

FIN 222 Credit Analysis 3

F,W Prerequisites: ACCT 102, FIN 138, FIN 221

Identifying and evaluating credit risk. Calculating ratios, reformatting information, constructing pro formas, designing cash flows and projecting results using key financial statements. Interpretive analysis involves using data to raise questions and draw conclusions about the financial conditions. Consideration of organizational, environmental, and social factors affecting a firm's operation.

FIN 223 Credit Management 3

W,Sp Prerequisites: FIN 222

Thirteen major case studies and five mini case studies, each in an area the credit practitioner might expect to encounter in the daily performance of their work. Students will analyze the detailed information contained in each case and draw upon their knowledge and experience to reach valid decisions. Class discussion and interaction are significant class activities.

FIN 224 Credit Law 3

F,Sp Prerequisites: BUS 230, FIN 221, MGT 105

Introduction to law, contracts, procedures, secured claims, bad checks, exemptions, unauthorized collection procedures, and lien claims. Special legalities regarding credit and granting of credit with particular emphasis on credit regulations and Utah commercial and consumer laws.

FIN 299 Current Topics in Finance and Credit 1-3

F,Sp Prerequisite: None

A forum to introduce topics of current interest and demand in the field of Finance and Credit to enhance preparation for work and/or continued study in Finance & Credit. Students participate in guest lectures, industrial visits, and special projects.

FLMM 105 Introduction To Film 4

A Prerequisite: None

This course introduces students with no previous film training to the historical, technical and aesthetic developments of film. *Citizen Kane, Victor Victoria, African Queen, Nosferatu,* and other films will be examined. Students should be aware that some materials presented are R-rated. *Also listed as THEE 105*

FLMM 107 Ethnic & Minority Film Studies 4

TBA Prerequisite: None

This course is intended to raise cultural awareness through an aesthetic, critical and interdisciplinary examination of ethnic and minority films and their evolution. Some films may be considered controversial and may carry an R-rating. *Also listed as THEE 107*

FLMM 214 Critical Introduction to Film 4

TBA Prerequisite: ENG 101, and either FLMM/THEE 105 or 107.

An in-depth exploration of the critical aspects of film including aesthetic and technical developments that have influenced film from its inception to the present day. Students will view key films. Some R-rated films will be presented.

FLRR 101 Professional Floral Design I 3

F Prerequisite: None

Learn professionalism in floral design. Theory, color, design, forms. Everyday items such as wedding and funeral arrangements. Work primarily with fresh flowers but also learn the use of silk and dried flowers.

FLRR 102 Professional Floral Design II 1

W Prerequisite: FLRR 101

Continuation of FLRR 101. Fresh, silk, dried flowers; business practices for professional employment.

FRN 101 Beginning French 5

A Prerequisite: None

First quarter Beginning French will focus on the basic grammatical and phonological patterns of French through conversations and readings.

FRN 102 Beginning French 5

A Prerequisite: FRN 101 or permission of instructor

Second quarter Beginning French will expand the skills of students with more extensive grammar and speaking exercises through conversations, comprehensive exercises and readings.

FRN 103 Beginning French 5

A Prerequisite: FRN 102 or permission of instructor

Third quarter Beginning French will further the communication skills of students with exercises and reading designed to develop an understanding of more complex grammar structures and idioms.

FRN 125 Special Studies in French 1-3

TBA Prerequisite: Permission of instructor

Special studies in language or culture. Students will plan their areas of study or travel and work with the instructor on an individualized basis.

FRN 201 Intermediate French 5

F Prerequisite: FRN 103 or equivalent

Second year French reviews grammatical structures with emphasis on comprehension and speaking while increasing focus on reading and writing skills involving materials taken from French Literature.

FRN 202 Intermediate French 5

W Prerequisite: FRN 103 or equivalent

Second year French reviews grammatical structures with emphasis on comprehension and speaking while increasing focus on reading and writing skills involving materials taken from French Literature.

FRN 275 Introduction to French Literature 5

Sp Prerequisite: FRN 103 or equivalent

Helps fluent French speaking students to expand reading, writing and comprehension skills through selections from French literature.

GD 101 Photography for Graphic Design 2

F,W Prerequisite: None

Basic introduction to photography as used in the advertising and publishing industries. How photographers and graphic designers work together. The ethics and legal aspects of commercial photography are reviewed. No camera is required for this course.

GD 104 Basic Photography 3

A Prerequisites: None

Basic course in understanding of cameras, lighting, and darkroom procedures with emphasis on 35 mm black and white applications. Camera and enlarger operations, filters, films, and printing paper explained. Darkroom work included.

GD 114 Drawing I 5

F,W Prerequisite: None

Methods of observation to improve drawing accuracy are practiced including negative and positive shapes, judging line direction, plumb line, and measuring proportions. Students also learn how to make line drawings look three dimensional by using shading in black and white.

GD 116 Principles and Elements of Art 3

F,W Prerequisite: None

Basic foundation course in the study of principles and elements of design. The student will demonstrate the uses of the principles of harmony and variety in design and graphic composition applications. The elements of art; line, value, texture, color, shape, and space will be explored with various graphic exercises. Projects will be limited to black and white mediums.

GD 118 Lettering 3

Sp,Su Prerequisite: None

Introduction to brush lettering and the Gothic alphabet with emphasis on proper letter form, spacing, and layout. The course includes choice, use, and proper care of instruments.

GD 119 Production Art I 3

W,Sp Prerequisite: None

Study of printing methods and terminology. Production of elementary camera-ready art including flat screens and color mechanicals. Keylining is introduced.

GD 120 Production Art II 3
Sp,Su *Prerequisite: GD 119*
Continuation of production of camera-ready art using keyline for flat and process color. Sophisticated manual production techniques are introduced. Students learn to operate stat camera.

GD 121 Math for Graphic Design 3
F,W,Sp *Prerequisite: None*
Basic mathematical fundamentals required of Graphic Designers, including fractions, decimals, percentages, ratios, proportioning and formulas used in copy fitting.

GD 122 Layout I 2
Sp,Su *Prerequisite: GD 135*
Layout artists help plan advertisements and put the idea for an ad into a form that others can understand. The course treats the "how-to" of layouts for ads, how to indicate headlines, the picture, the block of body copy, and the logo. This course should prepare the student in the mechanics of the advertising layout.

GD 123 Perspective 3
W,Sp *Prerequisite: GD 114*
This course teaches fundamentals of perspective for the artist. Practical use of the rules of perspective should help the student in all aspects of drawing and illustration.

GD 126 Figure Structure 3
W,Sp *Prerequisite: GD 114*
A study of the structure of the figure including proportions, basic forms, methods of construction and analysis, as well as the study of bones and muscles important to the artist. Also discussed are the facial features, planes of the face and other facts concerning the human form.

GD 127 Color 3
W,Sp *Prerequisite: None*
The student learns both the theory and use of color. Exercises are designed to teach the student to mix paint to color requirements for paintings and illustration.

GD 128 Media 3
W,Sp *Prerequisite: GD 114*
The student learns to use basic paint mediums such as acrylic and watercolor. It is a "how-to" course in basic painting methods. Both transparent and opaque techniques will be explored.

GD 132 Photographic Composition 2
Sp *Prerequisite: GD 104*
Art principles of balance, harmony, center of interest, eye movement-plus cropping are studied. Practical application of these principles will be emphasized.

GD 135 Typography I 3
Sp,Su *Prerequisite: None*
This course is the study of letter forms. The student gains an appreciation of the beauty and practical use of different type styles in use today in advertising and publishing.

GD 136 Life Drawing 3
F,Sp *Prerequisite: GD 126*
Gesture, contour, light and shade drawing of the head and figure of male and female models. Lab fee required.

GD 137 Design I 3
Sp,Su *Prerequisite: GD 116*
This course acquaints the student with the basic applied principles of advertising design. Simplified shapes, visual symbols, and analysis of old-time design movements are presented. At least one commercial design will be produced.

GD 139 Drawing II 3
Sp *Prerequisite: GD 123*
Creative drawing to help the student explore ways of expression using line, shape, value, and texture. Students draw on location using representation techniques. This course should help the student discover the fun of drawing.

GD 145 PC's for Design 2
F,W *Prerequisite: CL 101*
An introductory course designed to acquaint students with modern personal computer systems and their applications within the graphic design profession. Systems uses, types, input/output devices, and terms will be treated. Computer vs. Traditional methods will be discussed.

GD 146 Computer Production Art I 2
A *Prerequisite: CL 101*
This course focuses on the use of the computer for pagination, computer generated graphics, graphic designs, draw programs and text from word processors will be included. Simple drawing techniques will be introduced.

GD 171 Beginning Painting, Watercolor 3
Sp,Su *(also see School of Continuing & Community Education schedule) Prerequisite: None*
The emphasis of the course will be to explore various watercolor techniques in conjunction with discussions on composition. The subject matter will concern still life and as occasion permits, outdoor studies. *Also listed as ART 171.*

GD 172 Beginning Painting, Oil 3
F,W *(also see School of Continuing & Community Education schedule) Prerequisite: None*
The emphasis for beginning students will be to learn the fundamental craft and procedures inherent in oil painting practice. The subject matter will deal with still life and occasional outdoor studies. *Also listed as ART 172.*

GD 181 Intermediate Painting, Watercolor 3
Sp,Su *Prerequisite: GD 171*
A continuation of GD 171. Further development in various watercolor techniques and composition. *Also listed as ART 181.*

GD 182 Intermediate Painting, Oil 3
F,W *Prerequisite: GD 172*
A continuation of GD 172. Further development in oil painting. Composition and color will be emphasized. *Also listed as ART 182.*

GD 200 Graphic Design Cooperative Education 2-5
A *Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.*
Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major.

GD 202 Airbrush 2
F *Prerequisite: None*
Basic use and skill with airbrush. Application to a variety of rendering problems including simple dimensional forms and objects, multi-color masking, photo-retouching.

GD 204 Illustration I 3
W *Prerequisites: GD 128, & GD 136*
Foundation course for illustration students. Fundamentals of use of color and value to show dimension. Color and black/white mediums will be used.

GD 205 Portfolio Planning 1
F,W *Prerequisite: None*
Students plan their portfolios. This course prepares students for GD 267 Portfolio, which follows in Spring quarter.

GD 206 Paint Systems 3
F,W Prerequisite: GD 145
2-D illustration and video graphics. Students use "paint" systems to create various illustrations, alter photo/video inputs, execute life drawing, and copy layouts into the computer. Paint systems will be used in combination with desktop and presentation graphics.

GD 207 Presentation Graphics 3
Sp,Su Prerequisite: GD 206
Students use various presentation graphics software to create business graphics, charts, graphs, word charts, and title slides. Video input will be used in producing composites.

GD 210 Vector Graphics 3
W,Sp Prerequisite: GD 145
Introduction to 2-D Vector Graphics (artwork) and how it operates with "paint" and "presentation" systems. Students should create high-quality output of 2-D images, including: layouts, ads, business and presentation graphics, and edited vector drawings. 3-D graphics will be introduced.

GD 213 Computer Production Art II 3
F,W,Sp Prerequisite: GD 146
Students will create and use boxes, windows, borders, screens, manual color separations, and overlays. Multiple layouts, step-and-repeats, and page signatures will be included. Book and magazine production will be introduced. Students will learn to use the computer for four-color process.

GD 214 Life Drawing II 3
F,Sp Prerequisite: GD 136
A continuation of GD 136

GD 216 Illustration II 3
Sp Prerequisite: GD 204
Commercial illustration applications with emphasis on composition, drawing, creativity, and techniques. Both color and black/white mediums will be used.

GD 217 Illustration III 3
F Prerequisite: GD 216
A continuation of GD 216. Emphasis on problem solving and creativity. Color and black/white mediums will be used.

GD 218 Illustration IV 5
W Prerequisite: GD 217
A continuation of GD 217. Students have studio time to develop skills. Illustrations produced should approach professional level. Color and black/white mediums will be used.

GD 220 Computer Production Art III 3
W,Sp Prerequisite: permission of instructor
Advanced studies in production of camera ready art. Students use computers to produce sophisticated mechanicals for printing.

GD 227 Typography II 2
W Prerequisite: GD 135
Advanced studies in the use of type and its design. Students will solve communications/advertising problems through the creative use of typography. The student should discover the power and beauty of typography and should require a widening knowledge of the most-used type faces.

GD 228 Screen Printing 2
F,W,Su Prerequisite: None
The student builds a screen printing frame and acquires the skills needed to print by this ancient, yet modern, printing method. Both hand-cut and photo stencil procedures will be presented.

GD 229 Portrait Studies 2
F Prerequisites: GD 128 & GD 136
Studies will be made of the head and figure in paint media with emphasis on form representation using value and color. Models and photographic references will be used. Model fee required.

GD 230 Layout II 3
W Prerequisite: GD 122
Students will design layouts for brochures, billboards, newspaper ads, and magazine ads. Creative use of pictures, headline, and copy to solve promotion problems; and application of visual communication theories will be emphasized.

GD 231 Animation Graphics 3
Sp Prerequisites: GD 206 & GD 210
Students work with storyboards in both Paint systems and Vector Graphics to create animation.

GD 232 Advanced Studies in Computer Graphics 3
Sp Prerequisite: permission of instructor
This course continues all work begun in other Computer Graphics classes. Students pursue their own direction-putting together a finished and marketable portfolio. Students will learn how to purchase and set up their own work stations and market an end product.

GD 233 Advanced Typography 2
F Prerequisite: GD 227
Students will solve design and graphic communication problems through the creative use of typography, including execution of innovative lettering for reproduction. The use of typography as an integral part of design will be explored.

GD 237 Occupational Orientation 2
W,Sp Prerequisite: Second year status
Field trips to art studios, advertising agencies, sign shops, engraving and printing plants; includes job interview procedures. The student should gain insight into the graphic design industry.

GD 239 Design II 3
W Prerequisite: GD 137
A series of commercial designs will be produced by the student. For example, the student may be asked to design a menu for a restaurant, a logo for a company, or a brochure cover. The creative idea, handling the color, choice of materials, typography and execution are important.

GD 243 Graphic Design Trends 2
Sp Prerequisite: Second year status.
A study will be made of current trends in design and illustration. Students will incorporate some of these techniques in their own work.

GD 244 Advanced Screen Printing 2
Sp,Su Prerequisite: GD 228
An advanced class for students with prior experience with screen printing with emphasis on up-dated stencil methods, fine detail, exact register and use of a variety of inks on appropriate surfaces.

GD 245 Graphic Design Intern 3
Sp Prerequisite: 3.5 GPA plus portfolio review
Students work at a graphic design job location and receive academic credit rather than pay. This course provides the student with valuable on-the-job experience.

GD 249 Cartooning 3
W Prerequisite: GD 123
Cartooning is taught as a part of commercial or publishing illustration. A series of cartoon exercises teaches the basic techniques employed by cartoonists. Students produce several cartoons that fill advertising or publishing needs.

GD 250 Retail Illustration 2
Sp Prerequisite: GD 123
Techniques explored in retail store product illustration for advertising. Soft and hard goods rendered in both line and wash. The student learns the "tricks of the trade" and also techniques that insure good reproduction.

GD 252 Advanced Layout 3

W Prerequisite: GD 230

This course is an extension of GD 230. The student produces a variety of layouts for newspapers, magazines, billboards, and brochures. The student will investigate such things as: ad audience, ad image, psychology in ads, the ad as it fits into a campaign, and the interaction between layout artist and agency personnel.

GD 254 Packaging Design 2

Sp Prerequisite: GD 137

Basic packaging fundamentals, including design principles, package production and layout, and selling psychology. Application covers graphic design for boxes, labels, albums, and specialty packaging, and shopping bag design.

GD 258 Advanced Air Brush 2

W Prerequisite: GD 202

An advanced course in air brush. Sophisticated techniques will be explored. Air brush illustration will be included.

GD 259 Calligraphy 2

Sp,Su Prerequisite: None

Introduction to several of the major styles of penmanship, their recognition and appreciation. A review of the principles and elements of design and their application to projects in calligraphy.

GD 262 Corporate Design 2

W Prerequisite: GD 137

The student contacts an actual company and interviews the manager. Students and manager determine the total design needs of the company. The student then produces commercial designs to fill these needs.

GD 267 Portfolio 1

Sp Prerequisite: Second year status.

The quality of the student's portfolio often determines whether or not the student acquires a job in graphic design. Therefore the student is expected to spend a substantial amount of time and energy producing a professional portfolio. This course emphasizes the selection as well as execution of various art pieces. A resume for job application is a part of the course.

GD 268 Advertising Theory 3

Sp Prerequisite: Second year status.

Foundations of advertising, communication theory and history will be presented. Students will assume the roles of advertising agency personnel and will introduce a new product into a test market (simulated). Strategy, tactics, research, and choice and scheduling of media (TV, radio, newspaper, etc..) will be employed under the restriction of a given budget.

GD 297 Graphic Design Seminar 1-3

W Prerequisite: Prior agreement with instructor

Students gain insights into graphic design through travel to a city with opportunities to visit art studios, art museums, design institutions, etc. Special fee required. Seminar takes place between winter and spring quarters.

GD 299 Special Studies in Graphic Design 1-3

A Prerequisite: Prior agreement with instructor

Provides students with an opportunity to pursue advanced or special studies in a particular area of interest. Credit hours, subject, and course of study, shall be determined prior to registration by consultation and written agreement between instructor and student. The course of study may include design and production pieces for the Department Art Show. A maximum of 3 credit hours may be used toward diploma or degree. *Also listed as ART 299*

GED 010 GED Test Preparation 1

A Prerequisite: None

A course designed to prepare students to take the GED test. Includes individual testing and directed study.

GEOG 120 The Earth's Surface Environments 5

F,W,Sp Prerequisite: None

An exploration of the ways in which air, water, mineral materials, living things and energy from solar and other sources interact or create the challenging array of environmental opportunities and hazards experienced at the surface of the earth.

GEOG 160 Cultural Geography 5

F,W,Sp Prerequisite: None

A study of the major regions of the world emphasizing current activities and problems. Includes cultural, economic, political, and environmental considerations.

GEOL 101 Physical Geology *(PS)* 5

A Prerequisite: None

An introduction to the processes and materials that shape the earth. Includes mineral identification, map reading, erosion, deposition, volcanism, earthquakes, and continental drift.

GEOL 120 The Earth's Surface Environments 5

F,W,Sp Prerequisite: None

An exploration of the ways in which air, water, mineral materials, living things and energy from solar and other sources interact or create the challenging array of environmental opportunities and hazards experienced at the surface of the earth.

GER 101 Beginning German 5

A Prerequisite: None

First quarter Beginning German focuses on basic grammatical and phonological patterns of modern German through conversation comprehension exercises and readings.

GER 102 Beginning German 5

A Prerequisite: GER 101 or permission of instructor

Second quarter Beginning German expands the skills of students with more extensive grammar and speaking exercises through conversation and readings.

GER 103 Beginning German 5

A Prerequisite: GER 102 or permission of instructor

Third quarter Beginning German furthers the communication skills of students with exercises and readings designed to develop an understanding of more complex grammar structures and idioms.

GER 125 Special Studies in German 1-3

TBA Prerequisite: Permission of the department

Special studies in language or culture. Students will plan their areas of study or travel and work with the instructor on an individualized basis.

GER 201 Second Year German I 5

F Prerequisite: GER 103 or equivalent.

Second year German reviews grammatical structures with emphasis on comprehension and speaking while increasing focus on reading and writing skills involving readings taken from German literature.

GER 202 Second Year German II 5

W Prerequisite: GER 103 or equivalent

Second year German reviews grammatical structures with emphasis on comprehension and speaking while increasing focus on reading and writing skills involving readings taken from German literature.

HDM 114 Heavy Duty Chassis Lab 7
W,Sp *Prerequisite: Concurrent with HDM 115*
Practical experience in front-end steering, clutch, transmission, differential, suspension and undercarriage.

HDM 115 Heavy Duty Chassis Theory 5
W,Sp *Prerequisite: Concurrent with HDM 114*
Classroom instruction in front-end and steering, clutch, transmission, differential, suspension and undercarriage.

HDM 122 Basic Diesel Engines Lab 7
F,Sp *Prerequisite: Concurrent with HDM 123*
Practical experience in theory, operation, troubleshooting and repair, maintenance, and parts nomenclature of both 2-cycle and 4-cycle diesel engines.

HDM 123 Basic Diesel Engines Theory 5
F,Sp *Prerequisite: Concurrent with HDM 122*
Instruction in theory, operation, troubleshooting and repair, maintenance, and parts nomenclature of both 2-cycle and 4-cycle engines.

HDM 134 Preventive Maintenance Lab 7
F,W *Prerequisite: Concurrent with HDM 135*
Practical experience in preventive maintenance and servicing of heavy duty equipment.

HDM 135 Preventive Maintenance Theory 5
F,W *Prerequisite: Concurrent with HDM 134*
Classroom instruction in preventive maintenance and servicing of heavy duty equipment.

HDM 202 Heavy Duty Electrical Lab 7
F *Prerequisites: HDM 114, 115, 122, 123, 134, 135 or as authorized by instructor. Concurrent with HDM 203*
Practical experience in operation, maintenance, testing troubleshooting, and repair of electronic and electrical units in the heavy duty field. Basic operation, maintenance, and repair of air conditioning units. NOTE: Credit for this course may be earned through Cooperative Education.

HDM 203 Heavy Duty Electrical Theory 5
F *Prerequisites: HDM 114, 115, 122, 123, 134, 135 or as authorized by instructor. Concurrent with HDM 202.*
Classroom instruction in basic electronics, magnetism, electronic controls, operation, maintenance, testing, troubleshooting and repair of all electrical units in the heavy duty field. Basic operation, maintenance and repair of air conditioning units.

HDM 210 Computer Electronics & Advanced Fuel Systems Lab 7
Sp *Prerequisites: Must have completed 5 quarters in HDM, Concurrent with HDM 211*
Diagnosis, service, and repair of auto electronic components, instrumentation, and fuel systems. Auto emissions control systems service. Engine tune-up procedures. Use of testing equipment and analyzers. NOTE: Credit for this course may be earned through Cooperative Education.

HDM 211 Computer Electronics & Advanced Fuel System Theory 5
Sp *Prerequisites: Must have completed 5 quarters in HDM, Concurrent with HDM 210*
Theory and function of auto electronic systems and components and emissions control devices. Theory in the use of testing equipment and devices. Application of advanced servicing techniques.

HDM 222 Advanced Diesel Engines Lab 7
W *Prerequisites: HDM 122, 123. Concurrent with HDM 223.*
Lab application in tune-up, troubleshooting, and maintenance of 2-cycle and 4-cycle diesel engines with emphasis on all systems. NOTE: Credit for this course may be earned through Cooperative Education.

HDM 223 Advanced Diesel Engines Theory 5
W *Prerequisites: HDM 122, 123. Concurrent with HDM 222.*
Classroom instruction in tune-up, troubleshooting, and maintenance of 2-cycle and 4-cycle diesel engines with emphasis on all systems.

HDM 230 Heavy Duty Hydraulics Lab 7
Sp *Prerequisites: HDM 114, 115, 122, 123 Concurrent with HDM 231*
Practical application in mobile hydraulics, fundamentals, principles, and components.

HDM 231 Heavy Duty Hydraulics Theory 5
Sp *Prerequisites: HDM 114, 115, 122, 123 Concurrent with HDM 230*
Classroom instruction in fundamentals, principles and components of mobile hydraulic systems.

HIS 120 Early US History 5
F,W *Prerequisite: None*
General survey of American history from discovery through the Civil War; the establishment of the Constitution and westward expansion.

HIS 121 US History Since the Civil War 5
W,Sp *Prerequisite: None*
General survey of American history from the Civil War to the present.

HIS 170 American Civilization 5
A *Prerequisite: None*
The fundamentals of American history from exploration and colonization to the present with emphasis on historical, political, social, and economic events.

HIS 299 Utah History 5
A *Prerequisite: None*
A general survey of the history of Utah to the present and its place in the region and the nation.

HMT 101 Hazardous Materials Regulations I 3
TBA *Prerequisite: None*
A historical overview of the occupational, consumer and environmental health and safety issues. Introduction to past and present governmental regulations involving worker, consumer, and environmental protection programs in the US. Emphasis on identification, interpretation and compliance strategies of applicable OSHA regulations.

HMT 110 Industrial Processes 3
TBA *Prerequisite: Concurrent with CHEM 141*
Where hazardous materials are used and generated in various types of industrial processes. Understanding the constraints of product lines, special attention to potentially acute and chronic hazard exposures to various kinds of industrial processes.

HMT 120 Hazard Communication Standards 3
TBA *Prerequisite: None*
Development and implementation of a hazardous materials communication program for employees, the community, and emergency response personnel. Hazard determination, the written program, labeling, place carding, material safety data sheets (MSDS), and the employee training program.

HMT 130 Sampling & Analysis 3
TBA *Prerequisite: CHEM 141*
Methodology of sampling, analyzing, and interpreting the results of the analysis of hazardous materials. Industrial hygiene monitoring, testing pH and moisture content, selecting analytical services laboratories, and an introduction to chemical methods of analysis including spectroscopy and chromatography.

HMT 210 Emergency Response I 3
TBA Prerequisite: None
Emergency response contingency planning for a facility, preparedness including analysis of hazards, writing and implementing the contingency plans, training employees for an emergency, and evaluating the effectiveness of the contingency plan.

HMT 220 Hazardous Material Recovery, Incineration and Disposal 3
TBA Prerequisite: CHEM 141
Methods of recovery, incineration and/or disposal of hazardous waste. Contracting with qualified disposal organizations, obtaining permits and ensuring regulatory compliance of hazardous waste management.

HMT 230 Hazardous Materials Regulations 3
TBA Prerequisite: HMT 101
How to determine the applicability of federal, state and local regulations dealing with hazardous materials. Emphasis on obtaining and understanding transportation and emergency response regulations.

HMT 240 Emergency Response II 3
TBA Prerequisite: HMT 210
Coordination and implementation of emergency response procedures. Through simulated emergencies, students assess the incident, respond to the emergency, supervise clean-up processes, and provide public with necessary information.

HMT 280 Hazardous materials Health Effects 3
TBA Prerequisites: BIOL 205 and BIOL 206
A review of the research done to determine the systematic health effects of exposure to chemicals. Determination of risk factors, routes of entry of hazardous materials and their effects on target organs, acute and chronic effects, and control measures.

HORT 101 Landscape Plants and Their Uses 3
F,Sp Prerequisite: None
Landscape plants best suited for the climate of the intermountain area. The art of landscape design for esthetic value and functional use. *(This class may be taken for credit or non-credit--audit)*

HORT 102 Maintaining the Landscape 3
F,Sp Prerequisite: None
Landscape maintenance to save time and money. Soils, irrigation management, water conservation, and new techniques in weed control. Fertilization, planting, staking and pruning. *(This class may be taken for credit or non-credit--audit)*

HORT 103 Greenhouse Operations Lab 0
F,Su Prerequisite: None
Hands-on course in greenhouse operations. Follows a plant's life through greenhouse care to market. Greenhouse design includes solar adaptations. *(This class may be taken for credit or non-credit--audit)*

HORT 103L Greenhouse Operations 3
F,Su Prerequisite: Concurrent with HORT 103
Hands-on lab in greenhouse operations.

HORT 104 Insects, Plant Diseases and their Control 3
F,Su Prerequisite: None
The recognition and control of insect and disease problems found in ornamentals, vegetable and fruits common to the Intermountain West. Control practices, both non-chemical and pesticides. *(This class may be taken for credit or non-credit--audit)*

HORT 105 Growing Fruits & Vegetables 0-3
Sp Prerequisite: None
Increasing garden productivity and time-saving techniques in general gardening along the Wasatch Front. *(This class may be taken for credit or non-credit--audit)*

HORT 109 Floral Design 0-2
F,W,Sp Prerequisite: None
An exploration of floral design. Round, phased and live arrangements. Use of fresh, silk, and dried flowers to create personal designs of professional quality. *(This class may be taken for credit or non-credit--audit)*

HORT 110 Beekeeping 0-2
TBA Prerequisite: None
Survey of historical practices of beekeeping from ancient to modern times. Practices and techniques. Bee physiology, anatomy, life cycle, organization, language, mating behavior of the queen bee, and honey production. *(This class may be taken for credit or non-credit--audit)*

HS 230 Introductory Pathophysiology 4
TBA Prerequisite: None
An introduction to the nature of disease and its effect on body systems.

HU 101 Introduction to the Humanities *(INT)* 5
F,W,Sp Prerequisite: None
An exploratory approach to the humanities that focuses on the arts and the relationship of the humanities to values. Includes discussion of all art forms (visual art, music, literature, drama, film) and their relationship to ideas in the culture.

HU 102 Development of Western *(HU)* Civilizations, Ancient Cultures to Renaissance Europe 5
W Prerequisite: None
A historical survey of the major cultural achievements of Western Civilization. Introduction to major figures and events that stimulated philosophical, artistic and political movements influential in Western value systems.

HU 103 Development of Western *(HU)* Civilizations, Renaissance to Modern Day 5
Sp Prerequisite: None
A continued historical survey of western thought, examining the major cultural influences on our own contemporary world.

HU 110 Art Appreciation *(HU)* 3
F Prerequisite: None
An introduction to the visual arts. Leads the student through an awareness of conception, creation and evaluation of the major art forms. *(Also listed as FA 110)*

HU 111 Survey of Art History *(HU)* 5
F Prerequisite: None
An examination of visual art forms from the ancient civilizations to the Baroque period. Emphasis is on major works of art and the context in which new art movements appear.

HU 112 History of Modern Art *(HU)* 5
F,W,Sp Prerequisite: None
A historical survey of the major cultural achievements of Western Civilization. Students will be introduced to major figures and events that stimulated philosophical, artistic and political movements influential in Western value systems.

HU 121 Survey of Music History & Literature The Medieval Through Renaissance 3
TBA Prerequisite: None
A course in music history covering Medieval through Renaissance periods, approximately 500 through 1600 A.D. *Also listed as MUS 121.*

HU 122 Survey of Music History & Literature The Baroque Through Beethoven 3
TBA Prerequisite: None
A course in music history covering the Baroque through Classic periods (including Beethoven), approximately 1600 to 1800 A.D. *Also listed as MUS 122.*

HU 123 Survey of Music History & Literature Romantic Through 20th Century 3

TBA Prerequisite: None

A course in music history covering the Romantic through 20th Century periods and American music. *Also listed as MUS 123.*

HU 125 Special Studies in Humanities 1-2

F,W,Sp Prerequisite: None

Special topics in the area of humanities. Credits vary from one to two quarter hours. Students will plan their areas of study and work with the instructor on an individualized basis.

HU 200 Humanities Cooperative Education 3-6

A Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the job and the program major.

HU 241 Great Books *(HU)* 3

Sp Prerequisite: ENG 101 with a C grade or better

An interdisciplinary examination of writers and thinkers who probe man's nature and situation. First Series of Adult Great Books program.

HU 242 Great Books *(HU)* 3

F Prerequisite: ENG 101 with a C grade or better

An interdisciplinary examination of writers and thinkers who probe man's nature and situation. Fifth Series of Adult Great Books Program.

HU 272 Introduction to Shakespeare 3

Sp Prerequisite: ENG 101 with a C grade or better

A general survey of Shakespeare's works for the beginner student. Six plays spanning various genres will be examined for literary and human values. Answers the question "What makes Shakespeare great?"

HU 275 Philosophy in Literature *(INT)* 5

A Prerequisite: ENG 101 with a C grade or better

The most philosophical movements influencing great world literary works, from ancient Greece to the 20th Century.

IDD 150 Introduction to Design I 3

F, W Prerequisite: None

Learn home improvement through an introduction of design principles: floor plans, color coordination, furniture arrangement, accessorizing. Comparative price shopping and value for the dollar. All facets of interior design.

IDD 151 Design II 3

W, Sp Prerequisite: None

Application of design principles from the introductory class; further studies of backgrounds, fabrics, textiles, color use, furniture styles, architectural history, furniture arrangement, draperies and floor coverings. Design theory and application is emphasized.

IDD 152 Design Business Practices 3

W,Sp Prerequisite: None

Learn the basic business practices that would be applicable to the field of interior design; everything from owning or managing a design studio to owning and operating a small furniture and appliance store.

IDD 153 Design Sales 3

F,W Prerequisite: None

Learn techniques and obtain product knowledge in selling furniture and appliances. Gain experience in design jobs for homes and models. Learn the bidding process for commercial projects. Discover career opportunities available in the industry and the necessary tools to obtain these jobs.

IDD 154 Historical Furnishings 3

F, W Prerequisite: None

A survey of historical furnishings from the Egyptian Period through the Victorian Era.

IDD 155 Contemporary Furnishings 3

W,Sp Prerequisite: None

A survey of contemporary furnishings from the end of the Victorian Era to the present.

IDD 160 Design and Architect Drawing/Rendering 3

F, Sp Prerequisite: None

An exploration of the materials, techniques, and methods used in documenting and presenting visual ideas. Emphasis will be placed on drawing skills as a powerful tool for creative problem solving and communication. No previous drawing experience is necessary.

IDD 161 Space Utilization I 3

F,W Prerequisite: None

An exploration of the ways in which furnishings may be arranged in a given residential space to maximize utility and sound design principles.

IDD 162 Space Utilization II 3

F,Sp Prerequisite: None

Principles of space planning as they apply to commercial interior design.

IDD 200 Interior Design Internship 3

TBA Prerequisites: IDD 150 and IDD 152 (Optional)

Opportunity to interact with professional design studios or retail business in a working environment under the combined supervision of an on-site supervisor and a Salt Lake Community College instructor.

IND 108 Industrial Electronics 2

F,W,Sp Prerequisite: None

Basic vocational electronics and general electronic applications as used in the mechanical industry.

IND 147 Math for Industry 5

F,W,Sp Prerequisite: Permission

A basic vocational education math as it applies to general industry. To include a review of fractions, decimals, percentages, ratios and proportions, powers and roots, areas and volumes, rules and formulas with trades applications.

INT 101 Introduction to Interpreting 3

Sp,Su Prerequisites: COM 140, COM 141, COM 142

A working knowledge of the profession of interpreting. Course work will focus on roles and responsibilities of an interpreter, code of ethics, certification criteria, methods of interpreting and interpersonal skills. Examination of variety of interpreter settings. Role playing and videotaping utilized.

ITEE 233 Private Pilot Ground School 5

A Prerequisite: None

A study of the principles of light, aircraft and engine operations, weather, navigation, radio aids to navigation, radio communication, and federal regulations. Preparation for FAA Private Pilot Written Exam.

ITEE 234 Solo Flight 1

A Prerequisite: Concurrent with ITEE 233

Actual flight training in conjunction with subjects covered in ITEE 233. Approximately 12 hours of flight instruction leading to a solo flight. *(Estimated Flight Fee--$630)*

ITEE 235 Private Pilot Certification 1-3
A Prerequisite: ITEE 233/234, or permission of instructor.
FAA approved flying instruction building on the solo experience leading to proficiency of private pilot standards. Upon completion of this laboratory, the student will be prepared to take the FAA oral and in-flight examinations for a private pilot rating. *(Estimated Flight Fee--$1360).* One credit per quarter is recommended.

ITEE 251 Intermediate Flight 2
A Prerequisite: ITEE 235
An expansion of the study of principles and procedures introduced in the Private Pilot portion of the training. This course includes flight instruction and solo practice of commercial VFR cross-country procedures. Completion of pilot command cross-country time is necessary for an FAA Instrument rating. *(Estimated Flight Fee--$1850)*

ITEE 252 Commercial Pilot Ground School I 3
A Prerequisite: ITEE 235 or valid Private Pilot Certificate
Instruction is given in same areas of specialization as for Private Pilot Ground School, but items are covered in greater detail. The student will receive information needed to qualify as a commercial pilot with an unrestricted certificate. The course will include instruction in instrument procedures in preparation for the FAA Instrument Rating Written Examination.

ITEE 253 Commercial Pilot Ground School II 3
A Prerequisite: ITEE 252
This is a continuation of ITEE 252. The student will receive information needed to qualify as a commercial pilot with an unrestricted certificate. This course prepares the student to take the FAA Commercial Rating written examination.

ITEE 254 Instrumentation Certification 3
A Prerequisite: Concurrent with ITEE 252 or instructor 's permission
This course provides flight instruction and practice on instrument flight procedures in preparation for the FAA Instrument Rating. (Estimated flight fee $2,450)

ITL 101 Beginning Italian I 5
TBA Prerequisite: None
First quarter beginning Italian focuses on basic grammatical and phonological patterns of modern Italian through conversation, comprehension exercises and readings.

ITL 102 Beginning Italian II 5
TBA Prerequisite: ITL 101 or permission of instructor
Second quarter beginning Italian expands on the skills of students with more extensive grammar and speaking exercises through conversation readings.

ITL 103 Beginning Italian III 5
TBA Prerequisite: ITL 102 or permission of instructor
Third quarter beginning Italian will further the communication skills of students with exercises and readings designed to develop an understanding of more complex grammar structures and idioms.

JPN 101 Beginning Japanese I 5
TBA Prerequisite: None
First quarter beginning Japanese focuses on basic grammatical and phonological patterns of modern Japanese through conversation, comprehension exercises and readings.

JPN 102 Beginning Japanese II 5
TBA Prerequisite: JPN 101 or permission of instructor
Second quarter beginning Japanese expands the skills of students with more extensive grammar and speaking exercises through conversation and readings.

JPN 103 Beginning Japanese III 5
TBA Prerequisite: JPN 102 or permission of instructor
Third quarter beginning Japanese expands the communication skills of students with exercise and readings designed to develop understanding of more complex grammar structures and idioms.

JRN 101 Journalism I 3
F,W,Sp Prerequisite: English 101 with a C grade or better
Basic survey course in journalism which concentrates on fact finding and news writing. Members of the class also function as *Horizon* staff members during the quarter. Content includes investigative reporting, and broadcast and editorial writing.

JRN 102 Journalism II 3
F,W,Sp Prerequisite: JRN 101
Students study in-depth reporting, the past and future of journalism, interpretive reporting and editorial writing. Will be staff members on *Horizon*, the college newspaper. Students will work on an individual basis with the instructor.

JRN 103 Journalism III 3
F,W,Sp Prerequisite: JRN 102
Students study advanced news writing, editing and work as staff members on *Horizon*, the college newspaper. Students work on an individual basis with the instructor.

JRN 200 Journalism Cooperative Education 3-6
A Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.
Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the job and the program major.

LAA 101 Overview of Law and the Paralegal Profession 3
A Prerequisite: None
An introduction to the basics of briefing cases, legal definitions and the judicial process. Course also introduces students to substantive law and the paralegal's responsibilities in those areas.

LAA 102 Paralegal Writing 3
A Prerequisite: ENG 101 with grade of C or better
Legal writing process. Critical thinking, analysis, identification of key ideas and prioritizing of information. Should be taken concurrently with ENG 102.

LAA 103 Litigation and Civil Procedures 3
A Prerequisite: None
An examination of the court system at the federal, state, and local levels. Rules of civil procedures. Litigation as it relates to the paralegal from filing of the law suit through the discovery process and trial.

LAA 104 Legal Research I 3
A Prerequisites: ENG 101, ENG 102 Concurrent with LAA 106
An introduction to the law library and its basic research methodologies. An overview of subject areas, case research, secondary research, shepardizing, and statutory research.

LAA 106 Legal Writing I 3
A Prerequisites: ENG 101, ENG 102 Concurrent with LAA 104
An introduction to the basics of clarity, concision, cohesion, style and usage as they relate to legal writing and the paralegal. An introduction to legal vocabulary and routine legal correspondence to request and transmit information and simple documents.

LAA 107 Criminal Law & Procedures 3
F,W,Sp Prerequisite: None
An introduction to substantive law and criminal procedures. Criminal investigative techniques, skip tracing, and asset searches.

LAA 108 Contracts 3
F,Sp,Su Prerequisite: None
The elements of contracts, parole evidence, the Statute of Frauds, performance, discharge, and damages. Students will analyze various types of contracts and will gain some experience in writing contracts.

LAA 109 Business Law 3
F,Sp,Su Prerequisite: None
Concepts of law in the areas of business organization. Practice in drafting corporate documents, partnership documents, and other documents related to business transactions.

LAA 110 Bankruptcy 3
F,Sp,Su Prerequisite: None
A general analysis of the Bankruptcy Act, chapter proceedings, assignments of benefits, creditors, bulk sale, and out of court settlements.

LAA 111 Wills and Probate 3
F,Su Prerequisite: None
Preparation of wills, disposition of property other than by will, probate administration, estate litigation, and an introduction to estate taxation.

LAA 112 Practicalities & Realities For Legal Assistants 3
A Prerequisite: LAA 101 Must be taken near end of program
Practical realities of paralegalism including professional responsibilities and ethics, working relationships with law office staff and administration access to support services. Job seeking and the job market.

LAA 113 Administrative Law 3
W Prerequisite: LAA 119 (recommended)
A survey of a variety of legal assistant obligations and practice as it relates to government offices and agencies.

LAA 114 Legal Research II 3
A Prerequisites: LAA 104, LAA 106 Concurrent with LAA 115
An examination of the specialized methods of legal research including shepardizing, law reviews, blue book, horn books, loose leaf services, the American Law Reports System, and federal administrative materials.

LAA 115 Legal Writing II 3
A Prerequisites: LAA 104, LAA 105 Concurrent with LAA 114
Extensive practice at complex legal writing tasks, including memoranda, briefs, demand letters and pleadings.

LAA 117 Domestic Law 3
W,Su Prerequisite: None
A summary of Utah property law, joint tenancy and community property, domestic proceedings, child custody, settlement agreements, and enforcement of court orders. Tax consequences of support and division of property.

LAA 119 Constitutional Law 3
A Prerequisite: None
The United States Constitution and the Supreme Court decisions. The impact of these decisions on individual, business, and the government.

LAA 125 Securities 3
Sp Prerequisite: None
Notes, stocks, bonds, debentures, etc. Federal and state statutes governing the offering and sale of securities.

LAA 130 Torts: Personal Injury Litigation 3
A Prerequisite: None
An overview of tort law, oriented to paralegals. Specific skills will be developed in research analysis, drafting and investigation. Course includes negligence, wrongful death, products liability, and medical malpractice.

LAA 132 Human Relations, Interviewing & Ethics 3
A Prerequisite: None
Development of effective human relations and communication skills, and feedback and interviewing techniques through videotaped role playing. Confidentiality, unauthorized practice, professional negligence and other ethical consideration.

LAA 134 Principles of Insurance 3
A Prerequisite: Concurrent with LAA 136
This course provides paralegal students with an overview of insurance principles including property, auto, and liability coverages.

LAA 136 Liability Claims Adjusting 3
TBA Prerequisite: Concurrent with LAA 134
An introduction to general liability insurance claims and the principles of liability claims adjusting. Bodily injury, evaluation, negotiation, principles of tort law, liability insurance coverages and bad faith.

LAA 200 Paralegal Cooperative Education 3-6
A Prerequisite: Permission
Supervised work experience in a business, industrial, or government environment related to legal assistants. Credit awarded for successful completion of specific learning objectives that provide new learning on the job.

LAWW 100 Special Function Officer Course 3
TBA Prerequisite: Approval of P.O.S.T.
Satisfies the certification training requirements for those who desire to become employed in the law enforcement fields of airport or campus security, constable service and a number of selected positions with various regulatory agencies. This program also satisfies the requirements for those who are interested in becoming reserve or auxiliary officers. The program currently consists of 180 hours of training over an eight week period of time.

LAWW 150 Correctional Officer Course 0
TBA Prerequisite: LAWW 100 and approval of P.O.S.T.
Certification training for those desiring to become employed as correctional officers at the city and/or county levels. The program consists of a minimum of 80 hours of training over a four week period.

LAWW 200 Police Officer Basic Course 0
TBA Prerequisite: LAWW 100 and approval of P.O.S.T.
The final module of the training required to become a peace Officer in the State of Utah. This program currently consists of 280 hours of training over a 15 week period.

LE 101 Overview of Vocational and Technical Programs 2
F Prerequisite: None: (Previously listed as DS 101)
Students will explore vocational programs in areas taught at the College. They will be able to formulate an educational plan for their studies in one of these areas.

LE 105 Introduction to Library and Media Resources 1
F Prerequisite: None (Previously listed as DS 105)
An introduction to the resources available to the student in the SLCC Library and Media Center. It will provide the student with an overview of books, periodicals, and reference books, as well as the cassette and video tape materials available to the student. A basic outline of how to do library research will be discussed.

LE 122 Career Development *(SS)* 3
A Prerequisite: None
An analysis of creative and traditional methods of job research. Includes intensive self-assessment, goal setting, career exploration courses of job leads, written tools of communication, appearance interview techniques and human relations. Develops job seeking, job survival skills and basic understanding of business.

LE 125 Special Studies in Career and Personal Development 1-2
A Prerequisite: None (Previously listed as DS 125)
The course is designed to offer the student a number of topics related to career and personal development. Students would have the opportunity to select from a variety of subject areas that would be pertinent to their needs. Each unit would offer 1-2 credit hours of approved curriculum in areas of self-exploration/career planning; development of self-concept and self-worth; self-awareness; job hunting; college orientation; re-entry for adult students; problem solving, etc.

LE 126 Efficient Reading 3

A Prerequisite: None (Previously listed as DS 126)

Efficient reading will emphasize improving reading speed, recall and comprehension.

LE 127 Study Skills 2

A Prerequisite: None (Previously listed as DS 127)

Improving skills in learning and study techniques. Includes individual goal setting, time management, concentration, note taking, library use, test taking and use of college resources.

LE 130 Self-Image 2

A Prerequisite: None (Previously listed as DS 130)

This class develops or improves students positive self-image. The focus is on helping the individual student become more like the "ideal" image perceived by himself/herself. Classes will involve discussions, videos, cassette tapes and other media.

LS 105 Consumer Nutrition 3

A Prerequisite: None

Fundamentals of human nutrition and their application to a more healthful life-style.

LS 110 Principles of Nutrition 3

A Prerequisite: None

Basic principles of human nutrition and their application through the life style. Emphasis on diet/nutritional therapy.

LS 121 Personal Health 3

A Prerequisite: None

Studies in physical, mental and emotional health, and value concepts.

LS 125 Special Studies in Life Science 1-2

F,W,Sp Prerequisites: BIOL 101, 120, or 130, ENG 130, and permission of the instructor.

Special topics in the area of biology. May be arranged for credit varying from one to two hours. Individualized course with options including workshops, seminars or short courses.

LS 128 Alcohol & Drugs 3

A Prerequisite: None

A personal health class designed primarily to provide health related information as it applies to use and abuse of alcohol and other drugs. An in depth look at the physiological and psychological aspects of alcohol and other drugs will be included.

LSTT 180 Legal Secretary I 3

F Prerequisite: None

A structured program will provide knowledge in major areas of the law: terminology and law office procedures, preparation of legal documents, state and federal court systems, civil and criminal procedures, corporate procedures, and domestic relations.

LSTT 181 Legal Secretary II 3

W Prerequisite: None

This course emphasizes knowledge and skills in these areas: contracts and torts, litigation, appellate procedures, real estate law and procedures, legal research, bankruptcy, law office accounting, probate estate planning and gift and inheritance taxes.

MA 160 Medical Terminology 5

A Prerequisite: None

Lecture, film, and tape recordings of over 350 medical word roots, suffixes and prefixes, emphasis on pronunciation, spelling and usage.

MA 161 Medical Science I 5

A Prerequisite: Concurrent with MA 160, MA 171

Study of the basic structure and function of the body including cells, tissues, organs, systems. Lectures, films, and class discussions.

MA 162 Medical Science II 5

A Prerequisite: MA 161, and concurrent with MA 172

The study of the organs of special senses, neurology and psychology, endocrinology, pathology, microbiology, infectious disease and the basic concepts of asepsis through lecture, films, and class discussion.

MA 163 Clinical Procedures 5

A Prerequisite: MA 160, MA 161

Lectures, demonstration and theory of taking vital signs, patient histories, assisting with physical examination, performing sterile procedures, autoclaving instruments, preparation and administration of medications.

MA 164 Laboratory Procedures 5

A Prerequisite: MA 161, and concurrent with MA 174

Lecture, demonstration and theory of electrocardiography obtaining blood samples, hematology, urinalysis. The study of the urinary tract system. Ordering lab supplies.

MA 165 Medical Office Management I 5

A Prerequisite: MA 160, and concurrent with MA 175

Lecture, demonstration and theory in administrative responsibilities, front office procedures, first aid and cardiopulmonary resuscitation.

MA 166 Basic Radiology 3

A Prerequisite: MA 1612 or permission, and concurrent with MA 176

The study of the basic of radiology as it pertains to x-ray in the physician's office. Overview of radiology, radiation protection, use and care of film processor and x-ray tube. Take x-rays on phantom, process film.

MA 167 Medical Office Management II 3

A Prerequisite: MA 165, and concurrent with MA 177.

Lecture, demonstration and theory practice in administrative responsibilities, front office procedures using the CYMA program.

MA 168 Patient Care and Communication 2

A Prerequisites: MA 160 & MA 165

Lecture, demonstration and practice in medical transcriptions, vital signs, and front office procedures.

MA 171 Medical Science I Lab 2

A Prerequisite: Concurrent with MA 161

The study of the basic structure and function of the body using practical application of objectives.

MA 172 Medical Science II Lab 2

A Prerequisite: Concurrent with MA 162

The study of the organs of special senses, neurology, psychology, endocrinology, pathology microbiology, infectious disease and basic concepts of asepsis through practical application of objectives.

MA 173 Clinical Procedures Lab 2

A Prerequisite: Concurrent with MA 163

Practical experience in taking vital signs, patient histories, assisting with physical examination, performing sterile procedures, autoclaving instruments. Preparation and administration of medications.

MA 174 Laboratory Procedures Lab 3

A Prerequisite: Concurrent with MA 164

Practice in performing electrocardiography, obtaining blood samples, hematology, urinalysis and basic laboratory tests. The study of the urinary tract system..

MA 175 Medical Office Management I Lab 2

A Prerequisite: Concurrent with MA 165

Practical application of administrative responsibilities, from office procedures, first aid and cardiopulmonary resuscitation.

MA 176 Basic Radiology Lab 1
A Prerequisite: Concurrent with MA 166
The study of the basics of radiology as it appertains to x-ray in a physician's office. Overview of radiology, radiation protection, uses and care of film processor and x-ray tubes to take x-rays on phantom. Process films.

MA 177 Medical Office Management II Lab 2
A Prerequisite: Concurrent with MA 167
Practical application of administrative responsibilities, front office procedures using the CYMA program.

MA 201 Medical Assistant Externship 6
TBA Prerequisite: Completion of all required classes with a 2.0 or better in each class.
Students are placed in a physician's office to compete 200 hours performing all administrative and clinical duties under the supervision of the externing office. Each student will be evaluated twice during this time. Upon successful completion of externship, the student will be awarded the Medical Assistant Certificate.

MA 202 Medical Secretary Externship 3
A Prerequisite: Completion of all required classes with a 2.0 or better in each class
Students will be placed in a physician's office or other medical facility to complete 100 hours performing all administrative duties under the supervision of the externing office. Each student will be evaluated twice during this time. Upon successful completion of externship, the student will be awarded the Medical Secretary Certificate.

MACH 101 Blueprint Reading 4
F,W Prerequisite: None
Study of orthographic third angel projection including sketching, section conventions, auxiliary views, and interpretation of fractional and decimal measurements. Includes NC absolute and incremental measurements, drafting standards of blueprints, sections, auxiliary views, details, and specifications as they relate to the machine trades. Includes isometric oblique, and orthographic sketching techniques. The study of military standards, dimensioning, welding symbols, and how they affect machine shop drawings.

MACH 111 Introduction to Metallurgy 3
F,W,Sp Prerequisite: None
Introduction to metallurgy and the effects on the chemical makeup of materials due to stress from hot and cold workings of ferrous and nonferrous materials caused by welding and working of materials and joining dissimilar materials.

MACH 114 Basic Machine Technology Lab 4
F,W Prerequisite: None
Laboratory application of principles covered in MACH 115. Includes operation of drill presses, lathes, and extensive bench work with hand tools and introduction to mills.

MACH 115 Basic MachineTechnology Theory 4
F,W Prerequisite; None
Basic machine shop theory including operation and performance of drill presses, lathes, basic hand tools. Stresses measurement and accuracy. High speed cutting tools are taught.

MACH 120 Related Machine Shop 3
F,W,Sp Prerequisite: None
Introduction to engine lathe, tool grinding, basic drill press operations, bench work and layout.

MACH 124 Introduction NC/CNC Application 4
W Prerequisites: MACH 114, MACH 115
Application of principles covered in MACH 125. Includes operation of grinders, shapers, mills and intermediate lathe work with carbide and high speed cutting tools. Introduction to NC/CNC machine operations.

MACH 125 Introduction NC/CNC Machining 4
W Prerequisites: MACH 114, MACH 115
Basic machine shop theory including operation and performance of machine tools such as shapers, mills, planers, and NC/CNC machines. Emphasis is placed on operation, maintenance, and performance. The use of carbide and high speed cutting tools are taught.

MACH 134 NC/CNC Operations 4
Sp Prerequisites: MACH 124, MACH 125
Reviews operation of lathes, mills, with emphasis on speed and accuracy of production. Introduces the students to the operation and set-up of NC (Numerical Controlled) and CNC (Computer Numerical Controlled) machines.

MACH 135 NC/CNC Technology 4
Sp Prerequisites: MACH 124, MACH 125
Exposes the students to programming and computer assisted programming for NC (Numerical Controlled) and CNC (Computer Numerical Controlled) machines. Includes linear and circular interpolation, tool length compensation and subroutines. Introduces students to quality control and principles of metallurgy and heat treatment.

MACH 137 Introduction to Computer Aided Design/ Computer Aided Manufacturing (CAD/CAM) 3
F,Sp Prerequisites: MACH 124, 125 Concurrent with MACH 134
A basic CAD/CAM course. Nomenclature, acronyms, numerical (NC) and computer numerical (CNC) controls, sketching, design, computer aided design (CAD), transfer processes, (using ANSI protocol), set-up and machine working using NC & CNC equipment.

MACH 147 Machine Technology Math I 5
F Prerequisite: None
Review of whole numbers, fractions decimals, conversions, square roots. Phythagorean theorem, measurement and denominant numbers, metrics, and an introduction to algebra and formulas with their application to Machine Shop training.

MACH 148 Machine Technology Math II 5
W Prerequisite: MACH 147
Solving algebraic equations, manipulating formulas, ratio and proportion of gearing, fundamentals of plane geometry and layout, right triangle trigonometry, and geometric construction as applied to machining operations.

MACH 149 Machine Shop Math III 5
W Prerequisite: MACH 148
Fundamentals of plane trigonometry, basic analytical geometry as applied to two and three axis numerical control and computerized numerical control processes in machining operations.

ME 130 Statics 3
A Prerequisites: MTH 112, PHY 171
Forces, moments, and couples; resultants and static equilibrium of general force systems; statically equivalent force systems, center of gravity and center of pressure; friction; free body method of analysis; applications to simple engineering problems.

ME 210 Statistics and Metrology 4
W Prerequisite: MTH 112
Statistical distributions, random variables, significance and hypothesis tests, l east square curve fittings, regression analysis, experimental design, and experimental measurements.

ME 231 Strength of Materials I 3
F Prerequisites: ME 130 and ME 238, MTH 113 as co-requisite
Internal forces in members, concept of stress and strain. Hooke's Law, shear and bending moment in beams, torsion of circular bars, bending and shear stresses in beams, elementary stress resolution. Introduction to deflection in beams, introduction to column buckling.

ME 234 Dynamics I 3
W Prerequisites: ME 130, MTH 112
Position, velocity and acceleration, vector calculus, particle kinematics, kinetics of particles, including Newton's Laws, conservation of momentum and energy, impact vibratory motion of particles.

ME 235 Dynamics II 3

Sp *Prerequisites: ME 234, MTH 291*

Systems of particles kinematics or rigid bodies. Moving frames of reference, mass moments of inertia, plane rigid body kinetics including Newton's laws, conservation of momentum and energy, impact, introduction to three dimensional rigid body mechanics.

ME 238 Strength of Materials Laboratory 1

Sp *Prerequisites: ME 231*

Introductory laboratory in mechanical behavior of material using basic testing methods and instrumentation.

ME 280 Modeling of Physical Systems 3

Sp *Prerequisites: MTH 291, PHY 173*

Physical meaning of differential equations and their solutions; introduction to system parameters, elements and energy, lumped parameter modeling.

MFG 150 Related Machine Operation 5

F *Prerequisite: None*

Theory and application of drill press, lathe, hand tools, cutting tools, and measurements.

MFG 160 Intermediate Machine Operation 5

W *Prerequisite: MFG 150*

Theory and application of shapers, mills, grinders, and planers. Includes carbide and high speed cutting tools.

MFG 170 Manufacturing Processes 3

Sp *Prerequisite: MFG 150*

Analysis of materials and processes used in manufacturing. Includes cutting tool forces, proper selection and application of tool material, tool geometry and coolants.

MFG 200 Manufacturing Technology Cooperative Education 3-6

A *Prerequisites; Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.*

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major.

MFG 201 NC/CNC Programming 3

F *Prerequisite: MFG 160*

Numerical control applications, costs, manual programming, computer programming.

MFG 215 Engineering Materials 3

Sp *Prerequisites: CHEM 121, MFG 170*

Metal forming process selection, production planning, tooling, and quality control.

MFG 230 Quality Control Processes 3

Sp *Prerequisites: MFG 170*

Principles of inspection and testing methods, use of equipment to determine dimensional, physical, and chemical properties of materials and fabricated parts.

MGT 101 Introduction to Business 4

A *Prerequisite: None*

An overview of the American business system with special emphasis on terminology, government regulation, organization, management, accounting, finance, marketing and production.

MGT 110 Small Business Management 3

F,W,Sp *Prerequisite: None*

This course is designed primarily for non-business majors. Covers day-to-day operations of small business in service and/or trades industries. Includes licensing, taxes, personnel, insurance, financial controls, OSHA, and other government regulations.

MGT 160 Principles of Supervision 5

A *Prerequisite: None*

Role of effective supervision; employment needs and organizational objectives, training employees, measuring performance, and communicating with management.

MGT 200 Business Management Cooperative Education 3-6

A *Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.*

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major.

MGT 202 Entrepreneurship 5

F,Sp *Prerequisites: ACCT 101, MGT 101.*

Introduction to problems of the small business; planning, capitalization, borrowing, taxes, purchasing, personnel, organization, location. Promotion and financial control techniques are examined. Class is oriented to those wishing to go into business for themselves. Completion of a business plan including some market research.

MGT 205 Legal Environment of Business 5

A *Prerequisite: None*

Basic principles of business law, including torts, contracts, agency and commercial law. Types of businesses including sole proprietorship, partnerships and corporations. Common legal problem encountered by business managers.

MGT 207 Personnel & Labor Relations 4

F,Sp *Prerequisite: MGT 101*

Introduction to human resource management including job analysis and design, recruitment and selection, appraisal and training, compensation management, health and safety, and problems associated with unions and union activities. Projects in HRIS using Lotus 1,2,3 are completed
.

MGT 220 Business Statistics I 4

A *Prerequisites: MGT 101, MTH 101*

Introduction to basic business statistics, descriptive statistics, use of population parameters, probability, sampling, and information analysis. Emphasis on decision making in business management.

MGT 223 Work Design/Work Measurement 4

W *Prerequisite: CIS 140*

Analysis of tasks, organizational structure, work and information flow. Emphasis on methods of work, work station design and computer simulation problems. Measurement techniques including time studies, motion studies and work standards.

MGT 225 Production Management 4

W,Sp *Prerequisites: MGT 101, MGT 220*

Fundamental principles of coordinating materials, machines, people and money to create finished goods. Emphasis on production planning, scheduling, inventory control, quality control and plant location and layout through use of various systems techniques such as materials requirements planning and manufacturing resource planning.

MGT 230 Business Statistics II 4

A *Prerequisites: MGT 220, MTH 105*

Continuation of Business Statistics I. Review of probability and applied business problems to theoretical sampling distributions. Parametric and nonparametric tests and regression and correlation methods are studied. Business problems are applied to quantitative models for improving decisions.

MGT 235 Integrated Production Systems 5
Sp Prerequisite: MGT 225
Extended studies of production management functions including purchasing and statistical process control. Emphasis is given to how the various aspects of production management (planning, scheduling, inventory control, quality control, work design/measurement, automated manufacturing, plant layout) integrate within the context of the entire production system.

MGT 240 International Trade and Business 4
F,Sp Prerequisites: ECN 201, MGT 101
Introduction to international business from a practitioner's perspective. Emphasis on exporting and importing, financing sources and commercial paper, export credit insurance, export trading companies, mechanics of foreign freight forwarding and shipping, and international patents. Cultural differences impacting international trade and governmental assistance available in conducting International Business are studied.

MGT 250 Principles of Management 5
W,Sp Prerequisites: BUS 115, MGT 160
Theory and application of management including introduction to the management process, basic functions that management performs, the human component in management, and organizational processes.

MGT 260 Statistical Quality Control 3
W,Sp Prerequisites: MGT 220, MGT 230 recommended
Statistical techniques used in industrial quality and process control. Emphasis on the tools available for control such as frequency distribution charts, quality control charts, and sampling procedures.

MGT 270 Management of Automated Manufacturing Systems 5
Sp Prerequisites: MGT 223, MGT 225
Consideration of productivity improvement techniques for facilitating work processes. Analysis of automation including the use of microprocessors, computer-aided manufacturing, computer integrated manufacturing, computer-aided design, and numerical control.

MGT 299 Current Topics in Management 1-5
TBA Prerequisites: Variable to topic or project
This course will vary from quarter to quarter, but will present a forum where the student will be introduced to topics of current interest and demand in the field of management. Topics relevant to the management student will be introduced to enhance preparation for work and/or continued study in management. A special project is required.

MKTG 103 Introduction to Marketing 5
A Prerequisite: None
Introduction to the fundamentals of marketing with special emphasis on the marketing mix. Terminology, channels of distribution, opportunities in marketing, and how marketing relates to the overall world of business.

MKTG 107 Promotion 5
F,W Prerequisite: MKTG 103
Concentrates on the promotional mix of advertising, publicity, personal selling and sales promotion. Creativity, promotional planning and budgeting skills established through development of a promotional campaign.

MKTG 109 Retail Management 5
F Prerequisites: None
Fundamentals of retail organization, human resources in retailing, technological application, facility management, the buying process, merchandise negotiations, merchandise assortment, visual merchandising, sales, and distribution.

MKTG 123 Telemarketing 3
Sp Prerequisite: None
Introduction to the integrated and systematic application of telecommunications and information processing technologies to optimize the marketing concept.

MKTG 148 Sales 5
F,W,Su Prerequisite: MKTG 103
Concentration on the techniques in each of the steps of selling. Emphasis on pre-approach, needs, benefits, objections and closes. Experience in basic techniques through participation in a series of simulated sales calls. Emphasis on assisting the student to develop a philosophy of sales.

MKTG 191 Special Projects---Job Expo 3
W Prerequisite: None
Project develops activities that will bring personnel managers and other company officials on campus for a one-day JOB FAIR.

MKTG 200 Marketing Cooperative Education 3-6
A Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.
Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major.

MKTG 210 Marketing Information Management 3
W,Sp Prerequisite: MKTG 103
The exploration of various methods in gathering data to assist one in making marketing decisions. Various tools available, how to develop effective questionnaires, how to interview with questionnaires, how to set up focus groups and analyze the data gathered.

MKTG 212 Product and Pricing Strategies 3
Sp Prerequisite: MKTG 103
Decisions and strategies concerning development of products and services including: packaging, design, branding, trademarks, warranties, guarantees, product life cycles, setting and justifying prices in a highly regulated field subject to public scrutiny. Various pricing strategies are studied.

MKTG 236 Industrial Marketing 5
F Prerequisite: None
The operation of the industrial firm is developed primarily from the marketing/management approach, including its functions and problems. Attention to the planning process, the products, distribution, pricing, support functions, selling, advertising, promotion and international marketing.

MKTG 250 Principles of Marketing 5
Sp Prerequisites: MKTG 107, 210, 212, 236
A synthesis of marketing theory and practical application of marketing techniques to strategic planning and marketing plan management. It is recommended that students enroll in this class during their final quarter.

MKTG 299 Current Topics in Marketing 1-5
TBA Prerequisites: Variable to topic or project
This course will vary from quarter to quarter, but will present a forum where the student will be involved with topics of current interest and demand in the field of marketing, with special emphasis on career options. A special project is required.

MLS 101 Army Careers 2
F Prerequisite: None
The study of Army branches and requirements related to the selection of a career as an Army Officer. Must register for lab.

MLS 102 Winter Survival 2
W Prerequisite: None
Students learn the fundamentals of cross-country skiing, and snowshoeing. Techniques of building shelters and other survival skills are taught. Survival kits are prepared. *(PE elective for degree)*

MLS 103 Survival Operations 3
Sp Prerequisite: None
Theory and practical application of survival skills in mountain, water, and desert environments. Rappelling, map reading, ropes, knots, and rope bridges are discussed. A three day river trip is planned for late May, at the end of the course. *(PE elective for degree)*

MLS 104 Military First Aid 3
W Prerequisite: None
A course designed to train the student in basic first aid skills and the practical application in nuclear, biological or chemical environments. Must register for lab

MLS 150 Mountaineering/Water Operations 3
F,Su Prerequisite: None
Students will become familiar with the U.S. Army, the Army ROTC program and develop leadership traits. Students will learn specific skills of mountaineering and water survival including rappelling, knots, white-water rafting, etc. *(PE elective for degree)*

MLS 201 Military Map Reading 3
F Prerequisite: None
A course designed to acquaint the student with military maps, symbols and land navigation skills. Students work individually with an instructor and a senior cadet to complete requirements. Must register for lab.

MLS 204 Fundamentals of Leadership 3
Sp Prerequisite: None
A study of fundamental leadership skills with practical application and leadership assessment of personal skills. Must register for lab.

MLS 205 Military First Aid 3
W Prerequisite: None
A course designed to train the student in basic first aid skills and the practical application in nuclear, biological or chemical environments. Must register for lab.

MLSS 205 Orienteering 3
A Prerequisite: None
A popular European sport, map reading and land navigation is taught as skills to be used in orienteering. Types of maps, grid reference systems, map symbols, distance and direction are all reviewed. Time in the field is included as part of this course. *(PE elective for degree)*

MM 200 Maintenance Mechanics Cooperative Education 3-6
A Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.
Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major.

MSE 216 Elements of Materials &Engineering 4
F,Sp,Su Prerequisites: ME 130, CHEM 122
Study of crystal structure, imperfections and phase equilibria as related to the macroscopic mechanical properties of engineering materials.

MSE 260 Materials Science Engineering I 3
F Prerequisite: CHEM 123
Structure and bonding of solid metal, ceramics and polymer materials. Atomic processes in solids. Phase equilibria and phase changes. Relationships between structures and mechanical properties.

MSE 261 Materials Science Engineering II 3
W Prerequisite: MSE 260
Continuation of MSE 260.

MSE 270 Experiments in Materials Science 3
Sp Prerequisite: MSE 261
Lab experiments illustrating principles taught in MSE 260 and 261.

MSS 050 Machine Shop 0
A Prerequisite: None
Practical experience in bench work, drill press, and lathe operations. Includes shop safety, care maintenance of machines, shop math, and blueprint reading.

MSS 201 CNC I 5
A Prerequisite: None
Refresher in mathematics covering fractions, decimals, formula manipulations, trigonometry, Pythagorean theorem, and analytical geometry.

MSS 202 CNC II 5
A Prerequisite: MSS 201
CNC technicalities including multiple machine zeros. Tool offsets, tool lengths compensation, manual data input, reverse x and reverse y sub routine.

MTH 020 Developmental Mathematics 4
A Prerequisite: None
Basic arithmetic functions covering whole numbers, fractions and decimals. An individualized class with computer assisted instruction available.

MTH 021 Math Tutoring Lab 1
A Prerequisite: None
Personalized tutoring in mathematics for students enrolled in regular vocational-technical math, pre-algebra, elementary algebra, or intermediate algebra.

MTH 030 Pre-Nursing Mathematics 4
A Prerequisite: MTH 020 or appropriate score on ASSET test
Conversions of medical measurements in the metric, apothecary and household systems. Nursing applications are emphasized. An individualized class with computer-assisted instruction available.

MTH 035 Pre-Algebra Mathematics 4
A Prerequisite: MTH 020 or appropriate score on the ASSET test
Ratio-proportions, percents, introduction to solving simple equations, introduction to exponents and other related pre-algebra topics. *(Computer assisted instruction is available.)*

MTH 036 Pre-Industrial Mathematics 4
A Prerequisite: MTH 020 or appropriate score on ASSET test
Ratio-proportion, percents, metric measurement, and use of formulas and problem solving with industrial emphasis. *(Computer-assisted instruction available.)*

MTH 099 Elementary Algebra 5
A Prerequisite: MTH 035 with C grade or better or an appropriate score on ASSET test
An elementary course in algebra including integers, polynomials, factoring, linear equations, inequalities, functions, radical expressions and other appropriate elementary algebra topics. Computer aided instruction is available. This course is designed to prepare the student for math 101.

MTH 101 Intermediate Algebra 5
A Prerequisite: MTH 099 with a C grade or better
This course is a continuation of MTH 099 covering the same topics to much greater depth and continuing to include, quadratic formula and logarithms. This will prepare students to enter MTH 105.

MTH 103 Geometry 4
F,Su Prerequisite: MTH 101
Fundamentals of geometry necessary for success in technical math, trigonometry and for calculus and analytic geometry. Includes points, lines, angles, areas, circles, solid geometry introduction, logic.

MTH 105 College Algebra 5
A Prerequisite: MTH 101 with a C grade or better
Functions, graphs, complex numbers, quadratic functions, systems of equations, logarithms, matrices, determinants, inequalities, sequences, limits, series and combinations.

MTH 106 Plane Trigonometry 5
A Prerequisite: MTH 105 with a C grade or better
Circular functions, solution of right triangles, oblique triangles, solutions of trigonometric equations, identities and graphing of trigonometric functions, inverse functions and polar-rectangular conversions.

MTH 109 Precalculus 5
A Prerequisite: MTH 106
A refresher course for those who need a review of algebra and trigonometry before taking calculus. Not a required course for any program.

MTH 111 Calculus I 5
A Prerequisite: MTH 106 or equivalent with a C grade or better
Functions and their graphs; differentiation and antidifferentiation of polynomial and rational functions; geometric applications of the derivative; minimization and maximization; the definite integral.

MTH 112 Calculus II 5
A Prerequisite: MTH 111 with a C grade or better
Integration techniques including substitution, integration by parts, partial fractions, volumes of revolution and improper integrals, differentiation and antidifferentiation of transcendental functions.

MTH 113 Calculus III 5
A Prerequisite: MTH 112 with a C grade or better
Infinite series, curves and surfaces, partial derivatives and multiple integrals.

MTH 125 Special Studies in Mathematics 1-2
F,W,Sp Prerequisite: Permission of instructor required
Special topics in mathematics. May be arranged for credit, varying from one to two quarter hours. Since the class is individualized, options available are workshop, seminar or short course.

MTH 141 Statistics 4
A Prerequisite: MTH 101 with a C grade or better
Modern statistics including summarization of data. Introduction to probability. Elementary methods of estimation and statistical testing.

MTH 200 Mathematics Cooperative Education 3-6
A Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.
Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning in the program major.

MTH 201 Mathematics for Elementary Teachers I 4
W Prerequisite: MTH 101
Mathematics for elementary teachers, sets, logic, foundations of arithmetic and algebra, intuitive geometry, matrices, probability and statistics.

MTH 202 Mathematics for Elementary Teachers II 4
Sp Prerequisite: MTH 201
A continuation of MTH 201.

MTH 240 Finite Mathematics 4
F Prerequisite: MTH 101 with a C grade or better
Topics in logic, counting, probability and statistics, matrices, linear programming and game theory.

MTH 291 Ordinary Differential Equations 3
F,W Prerequisite: MTH 113 with a C grade or better
Ordinary differential equations for science and engineering. First order equations, second and high order linear equations, linear systems of differential equations, Laplace transform methods, applications to mechanics and electrical circuits.

MTH 292 Matrices and Vector Analysis 3
W,Sp Prerequisite: MTH 291 with a C grade or better
Matrices and vector analysis for science and engineering. Vector algebra, matrices and systems of linear algebraic equations; vector differential calculus, divergence, curl; vector integral calculus, line, surface and volume integrals, Gauss's, Green's and Stokes' theorems.

MTH 293 Partial Differential Equations 3
Sp,Su Prerequisite: MTH 292 with C grade or better
Fourier series and boundary value problems for the wave, heat and Laplace equations, separation of variables, Strum-Liouville problems and orthogonal expansions, Bessel functions and Legendre polynomials.

MUS 105 Music and Culture 5
F,W,Sp Prerequisite: None
A beginning course in music appreciation and music history. Taught in context with other arts, literature, and philosophical ideas.

MUS 121 Survey of Music History & Literature The Medieval Through Renaissance 3
TBA Prerequisite: None
A course in music history covering Medieval through Renaissance periods, approximately 500 through 1600 A.D. *Also listed as HU121.*

MUS 122 Survey of Music History & Literature The Baroque Through Beethoven 3
TBA Prerequisite: None
A course in music history covering the Baroque through Classic periods (including Beethoven), approximately 1600 to 1800 A.D. *Also listed as HU122.*

MUS 123 Survey of Music History & Literature Romantic Through 20th Century 3
TBA Prerequisite: None
A course in music history covering the Romantic through 20th Century periods and American music. *Also listed as HU123.*

MUS 125 Special Studies in Music 1-2
TBA Prerequisite: Permission of instructor.
Special topics in music. Students will plan their areas of work or performance with the instructor on an individual basis.

MUS 142 Music for Teachers 3
F Prerequisite: None
Music and movement for children; application and use as a teaching tool. Gross motor activities pertinent to child's developmental level. Student will create a file (songs, finger plays, gross motor activities). *This course is also listed as ECD 142.*

NSG 110 Introduction to Nursing *(PN)* 2
A Prerequisite: Acceptance into Practical Nursing program
Basic medical terminology; basic mathematics review, including metric and apothecary systems of measurements, conversion of one system to the other; professional ethics and legal responsibilities; roles and issues of Practical Nurse; health and care systems; computer seminar.

NSG 115 Role of the Professional Nurse 1
A Prerequisites: Graduate of a State-approved PN program and acceptance into second year of ADN Program.
Bridge course designed to span the role assignment from LPN to Registered Nursing. Includes issues and topics signficant to Registered Nursing.

NSG 120 Introduction to Nursing **2**
A *Prerequisites: Acceptance into the ADN program. Concurrent with BIOL 205, 206, LS 110, PSY 101*
A basic course introducing basic medical terminology, the health team and health care systems, roles and issues pertaining to health care systems, roles and issues pertaining to registered nursing, professional ethics and legal responsibilities. Also includes a seminar to introduce students to use of computers in health care systems.

NSG 121 Nursing Fundamentals **9**
A *Prerequisites: BIOL 205,206, LS 110, NSG 110 or NSG 120,PSY 101.*
An introductory course designed to provide a foundation in nursing theory and practice through the utilization of the nursing process. Basic theoretical content in the science of nursing builds upon prior knowledge and integrates concepts from general education courses, and prepares the student to meet the biopsychological needs of clients.

NSG 123 Pharmacology I **1**
A *Prerequisite: NSG 110 or NSG 120.*
Principles of Pharmacology as applied to the basic nursing process. Includes calculations of dosages and administration of medications.

NSG 124 Pharmacology II **1**
A *Prerequisite: NSG 110 or NSG 120.*
Continuing principles of pharmacology as applied to the nursing process. Includes classification of drugs.

NSG 125 Pharmacology III **1**
A *Prerequisite: NSG 110 or NSG 120.*
Continuing principles of pharmacology as drug administration as applied to the nursing process. Includes specific drug-related actions and reactions in various body systems.

NSG 130 Nursing of Adult Review **6**
A *Prerequisite: Graduation from a Practical Nursing Program.*
Principles of Medical Surgical Nursing including Pathophysiological conditions of the adult and elderly; builds on previous knowledge and prior nursing experience.

NSG 131 Nursing of the Adult **10**
A *Prerequisites: NSG 121, NSG 123.*
Principles of medical and surgical nursing including pathophysiological conditions of the adult and elderly.

NSG 141 Maternal/Newborn Nursing **6**
A *Prerequisites: BIOL 214, 215, NSG 131 Concurrent with NSG 142, PSY 150*
Broad-based knowledge of principles of maternal/newborn care including problems of both normal and abnormal childbearing cycles, building upon theoretical concepts and skills learned in prior nursing and general education classes. Emphasis is placed on family-centered experiences during this cycle. Five-week concurrent clinical practicum provides supervised application of knowledge and principles of maternal/newborn nursing theory in a variety of appropriate clinical facilities. Successful completion of both theoretical and clinical components is required to receive credit for the course.

NSG 142 Nursing of Children **6**
A *Prerequisites: BIOL 214, 215, NSG 131 Concurrent with NSG 141, PSY 150*
Pediatric nursing theory and lab dealing with acute and chronic illnesses of children ages newborn to 18 years. Theoretical and application principles correlated by age and concurrent disorders, building on knowledge and skills learned in previous courses. Emphasis is placed on family participation in care of children. A five week concurrent clinical practicum provides supervised application of theoretical knowledge and principle of care for children ages newborn to 18 years in a variety of appropriate clinical facilities. Successful completion of both theoretical and clinical components is required to receive credit for the course.

NSG 221 Advanced Nursing of Adults I **10**
Sp *Prerequisites: NSG 141, 142, PSY 150 concurrent with CHEM 140*
A theoretical and lab course to further develop knowledge and skills in principles related to common health needs of adults and elderly, using the more in-depth components of the nursing process and nursing diagnosis. Builds upon theoretical concepts and skills from previous nursing and general education classes. Includes theory in abnormal conditions relating to mental health concepts, and the role of the registered nurse in psychiatric setting. Concurrent clinical practicum in caring for adults and elderly with common medical, surgical, and mental health needs with knowledge and principles. Emphasis placed on utilizing assessment skills, nursing process and nursing diagnosis. Successful completion of both theoretical and clinical components is required to receive credit for the course.

NSG 231 Family Centered Nursing **8**
A *Prerequisite: NSG 221*
Culmination and synthesis of all prior nursing and general education classes. Theoretical concepts and lab in developing knowledge of principles and skills to health needs of the family, with emphasis placed on interaction with families during this course. Concurrent clinical practicum in various health care settings provides supervised application of knowledge and principles while caring for infants, children, and adults experiencing common health problems with predictable outcomes. Successful completion of both theoretical and clinical components is required to receive credit for the course.

NSG 241 Advanced Nursing of Adults II **8**
A *Prerequisite: NSG 231*
Basic concepts of managing groups of less skilled health care personnel with emphasis on evaluation and implementation of nursing care in collaboration with other health care professionals. Continuing theory and lab course using in-depth skills of the nursing process in caring for adults and elderly.

OIS 101 Secretarial Bookkeeping **3**
A *Prerequisite: None*
Designed to give basic bookkeeping principles and an understanding of accounts receivable, accounts payable, payroll, cashiering, the use of journals and ledgers in double-entry bookkeeping systems. Emphasis preparing students to handle many clerical positions, have an acquaintance with business forms and procedures for getting those records into the books. A familiarity with business terminology and business machines is included on a regular basis with each session. *Also, taught evenings during Fall and Spring quarters.*

OIS 102 Keyboarding for Computer Aided Drafting **1**
F,W,Sp *Prerequisite: Basic English reading and comprehension*
Keyboarding for Computer Aided Drafting Design majors only. Prepares students to keyboard by touch for data entry in conjunction with graphics design computer applications. *Also, taught evenings during Fall and Spring quarters.*

OIS 106 WordPerfect--Getting Started **1**
A *Prerequisite: None*
A course to assist any student in understanding the basic functions of Word Perfect including: entering, exiting, saving, formatting, editing, spell check, thesaurus, and other basic operations necessary in completing routine class assignments.

OIS 107 Beginning Keyboarding **3**
A *Prerequisite: None*
Emphasis on learning the keyboard by touch using microcomputers with WordPerfect software. Course covers alphabet keys, number keys, and symbol keys. Emphasis on keyboarding techniques, speed and accuracy. Introduces basic formatting of letters, memos, reports, and simple centering problems. *Also, taught evenings during Fall, Winter and Spring quarters.*

OIS 108 WordPerfect for Non-OIS Majors 3

A Prerequisite: OIS 107 or typing speed of 25 NWAM

Excellent introductory hands-on course to word processing using WordPerfect software. Students learn to create, edit, and save documents, use list files, speller, thesaurus, search and replace, sort, mail merge, text columns, math, and reports with footnotes. All function keys are covered. *Also, taught evenings during Fall, Winter and Spring quarters.*

OIS 110 Back-To-Work Word Processing/ WordPerfect 4

A Prerequisite: Must already have typing skills

80 hours total, intensive training in WordPerfect software from beginning through advanced functions. Must already have typing skill.

OIS 112 WordPerfect for OIS Majors 5

A Prerequisites: OIS 107 or equivalent and typing speed of 30 NWAM Concurrent with OIS 115

Students learn to use WordPerfect software to format business letters, memos, reports, tables, etc. Various WordPerfect functions such as sort, merge, and simple macros are also covered. *Also, taught evenings during Fall, Winter and Spring quarters. This course is a prerequisite for several OIS courses.*

OIS 115 Keyboard Skill Building 2

A Prerequisite: OIS 107 or equivalent Typing speed 20 NWPM

Intensive speed building practice and drills to help students increase speed and accuracy. This class is for students with typing speeds between 20 and 50 NWPM. Complete review of the keyboard with correct keyboarding techniques checked and stressed. Timings used to build speed and accuracy. Excellent class for preparation for State and industry typewriting speed tests. *Also, taught evenings during Fall, Winter and Spring quarters.*

OIS 116 Advanced Keyboard Skill Building 2

A Prerequisites: OIS 107 or equivalent, OIS 115 and typing speed 50 NWPM and above.

Designed to further increase keyboard speed and accuracy and to build skill to a job-marketable level. Correct keyboarding techniques checked and stressed. Timings used to build speed and accuracy. *Also, taught evenings during Fall, Winter and Spring quarters.*

OIS 121 Shorthand I 5

A Prerequisite: Typing skill of 30 NWAM

Speedwriting is an alphabetic system. Students progress rapidly and attain speeds needed for office dictation and a variety of note taking situations such as classroom notes, minutes of meetings, etc. **Also, taught evenings during Fall and Winter quarters.*

OIS 122 Shorthand II 5

A Prerequisite: Shorthand skills and typing 30 WPM

Students develop shorthand speeds acceptable for employment. Specialized dictation, theory reinforcement and vocabulary development, grammar, punctuation, and spelling rules, covered. Ending dictation speed 60-80 WAM. All systems reviewed including: Gregg (series 90, Diamond Jubilee and Simplified), Century 21, Speedwriting (Landmark and Regency), and Forkner. Good class for updating and theory review. *Also, taught evenings during Winter and Spring quarters.*

OIS 123 Shorthand III 5

W,Sp Prerequisites: Shorthand skills and typing 30 NWAM

Transcription and speed building emphasized for all shorthand systems. Designed for students who want to get specialized practice in dictation and transcription of mailable projects such as letters, minutes, itineraries, etc. Grammar, punctuation, and spelling rules reviewed. *Also, taught evenings during Spring quarter.*

OIS 125 Beginning Data Entry 3

F,W,Sp Prerequisite: Type 25 NWPM

Practical instruction and hands-on experience using educational software with emphasis in typewriter and 10-key keyboard combination while developing speed and accuracy in data entry. *May be used as an OIS degree elective.*

OIS 130 Back-To-Work Office Machines 2

A Prerequisite: None

40 hours of instruction in 10-key adding machine, speed and accuracy drills, basic functions of the electronic calculator, and basic business math.

OIS 131 Business Machines 2

A Prerequisite: BUS 080

Instruction on electronic calculators for entry-level competency using the ten-key touch method to develop ability to transfer this method to other machines such as computer terminals, word processors, and microcomputers. *Also, taught evenings during Fall, Winter and Spring quarters.*

OIS 132 Back-To-Work Office Accounting 2

A Prerequisite: OIS 130

Training in basic record keeping, double entry bookkeeping, special journals, and preparation of basic financial reports.

OIS 140 Information Processing Concepts 3

A Prerequisite: None (OIS 107 or equivalent is recommended)

Introduces historical and technical concepts and vocabulary in the field of information processing. Includes word processing, DOS, magnetic media, reprographics, micrographics, printers, word processing trends, and several hands-on projects. This course is prerequisite to OIS 212 and OIS 230. *Also, taught evenings during Fall and Winter quarters.*

OIS 150 Back-To-Work Office Procedures 6

A Prerequisite: None

120 hours total--includes one hour per day in speed building on the typewriter, two hours per day working on units in filing, proofreading, transcribing machines, spreadsheets, and English and job-seeking skills.

OIS 155 Records Management 3

A Prerequisite: None

Taught from users point of view. Introduction to supplies and filing equipment and procedures. Individualized practice in card and correspondence filing and retrieval using alphabetic, numeric, geographic, and subject systems. *Also, taught evenings during Winter quarter.*

OIS 187 Vocabulary Building 3

A Prerequisite: None

College vocabulary building and spelling improvements designed to expose students to more commonly used words, business terms and most often misspelled words; spelling rules, addition of prefixes and suffixes to root words. *Also, taught evenings during Winter quarter.*

OIS 200 Office Information Systems Cooperative Education A

A Prerequisites: Completion of two quarters of the total program with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major. *Also, taught evenings during Fall, Winter and Spring quarter.*

OIS 201 Secretarial Procedures 5

F,W,Sp Prerequisite: OIS 112, typing speed of 40 NWAM. OIS 101, OIS 187 (helpful)

Practice in decision making, composing documents, public relations, written and oral communications, travel and conference arrangements, telephone usage, meeting planning, and job-seeking/selection. Exposure to aspects of office work and duties of both a business and personal nature. Utilizes simulations related to on-the-job experience. Note: Class should be taken during the last quarter of a program as a finishing course; not a first--quarter class. *Also, taught evenings during Spring quarter.*

OIS 210 Administrative Office Management 5
W,Sp Prerequisite: MGT 101
Development of managerial techniques in working with people. Practice in setting objectives, decision-making techniques, assigning responsibility, increased productivity, better utilization of resources, and handling office personnel problems. *Also, taught evenings during Winter quarter.*

OIS 212 Advanced WordPerfect 5
F,W,Sp Prerequisite: OIS 112
Covers advanced WordPerfect functions including math, graphics, desktop publishing, advanced merge and sort, switch, text columns, column, rectangle move, etc. *Also, taught evenings during Winter and Spring quarters.*

OIS 225 Beginning Desktop Publishing 5
W,Sp,Su Prerequisites: OIS 112, 140, 212, or instructor's approval
Introduction to desktop publishing using Ventura software. Designed to train word/information processing specialists to utilize desktop publishing for appropriate applications. *Also, taught evenings during Fall and Spring quarters.*

OIS 231 Microcomputer Word Processing 5
W,Sp Prerequisites: OIS 112, 140
For Information Processing majors. Students learn basics of various word processing programs available--including MultiMate, WordStar and DisplayWrite 4 and WANGOIS. Designed to expand the student's experience and job-marketable skills. *Also, taught evenings during Fall quarter.*

OIS 232 Lotus I for OIS Majors 3
W,Sp,Su Prerequisites: OIS 101 or equivalent, OIS 140
Designed to train OIS students in the use of Lotus 1-2-3. Students learn the basics of Lotus currently required for most word/information processing specialist positions. Includes spreadsheet format and basic commands, simple macros, and queries. Includes an introduction to basic DOS commands. Making directories and subdirectories, disk and document format, copy, compare, are also included. This course is a prerequisite for several courses. **Also, taught evenings during Winter quarter.*

OIS 235 Machine Transcription/Proofreading 3
A Prerequisites: BUS 101, OIS 112
Practice in transcribing information from sound media. The program reviews spelling, punctuation, capitalization, formatting, and proofreading. *Also, taught evenings during Winter quarter.*

OIS 240 Word Processing Feasibility and Management 2
Sp Prerequisites: OIS 140, OIS 112, OIS 212 and OIS 231
Students visit several word processing environments. From these field trips, students compare equipment configurations and make equipment selections for specific office applications. *Also, taught in the evening by special arrangement.*

OIS 299 Special Studies TBA
A Prerequisite: Instructor approval
Individual, specialized study course. May include keyboarding, intermediate keyboarding, word processing and related classes as well as specific software application study. To be arranged with instructor. *Also, taught evenings during Fall, Winter, and Spring quarters.*

PE 105 Fitness for Life 1
A Prerequisites: None
Facts about exercise and health. Students design their own personal program to improve flexibility, muscle tone, and cardiovascular fitness.

PE 106 Jogging/Walking 1
F,Sp,Su Prerequisite: None
Improving cardiovascular endurance, muscular strength flexibility through jogging and walking.

PE 107 Beginning Aerobics 1
A Prerequisite: None
A coeducational class designed to increase cardiovascular endurance, muscular strength, and flexibility through dance and exercise patterns.

PE 108 Intermediate Aerobics 1
A Prerequisite: PE 107, or the equivalent
A continuation of PE 107. Students acquire a more strenuous and advanced level of aerobics proficiency.

PE 110 Beginning Weight Training 1
A Prerequisite: None
A beginning weight training class designed to introduce the basic principles involved in resistance exercise. Students develop individual and personalized program of strength and endurance building.

PE 111 Weight Training, Intermediate 1
A Prerequisite: PE 110 or equivalent
Continuation of theory and practice of maximal strength development in an individual's program.

PE 115 Beginning Basketball 1
A Prerequisite: None
Instruction in the fundamentals of basketball, with emphasis on passing, shooting and dribbling skill development in drill work and team play. Evaluation of rules and all skills that are taught.

PE 116 Intermediate Basketball 1
A Prerequisite: PE 115 or equivalent
Further enhancement of skill in basketball with emphasis on a more competitive level of play.

PE 117 Competitive Basketball 1
F,W Prerequisite: Must Be On Varsity Team
Aspects of intercollegiate competition, complex offensive and defensive plays, rules of the game, advanced team discipline, and related topics.

PE 118 Beginning Soccer 1
F,Sp,Su Prerequisite: None
Fundamentals of soccer, rules of the game, techniques, skills practice, and evaluation of skills and rules.

PE 121 Softball 1
F,Sp, Su *Prerequisite: None*
Fundamental skills, conditioning, rules and game strategy. Skills practice and evaluation of skills and rules.

PE 123 Beginning Volleyball 1
A Prerequisite: None
Fundamental skills of serving, passing, setting and spiking. Competitive play for practice and evaluation of skills and rules.

PE 124 Intermediate Volleyball 1
F,Sp,W Prerequisite: PE 123 or equivalent
Further enhancement of volleyball skills with emphasis on team play.

PE 139 Beginning Tennis 1
F,Sp,Su Prerequisite: None
Fundamental skills of service, forehand, and backhand strokes and rules of play. Competitive play for practice, and evaluation of skills and rules.

PE 140 Intermediate Tennis 1
F,Sp,Su Prerequisite: PE 139 or equivalent
Court strategy and the development of more advanced levels of proficiency.

PE 141 Advanced Tennis 1
F,Sp,Su Prerequisite: PE 140 or permission of instructor
Further opportunity for skill development and increased levels of competitive play.

PE 166 Beginning Swimming 1
A Prerequisite: None
A class for non-swimmers or fearful swimmers. Instruction in floats, basic stroke technique, water comfort and safety.

PE 167 Intermediate Swimming 1
F,W,Sp Prerequisite: PE 166 or equivalent
Further instruction in stroke technique, rhythmic breathing, and water safety skills.

PE 169 Water Fitness: Aquacise 1
A Prerequisite: None
Water exercise program designed to increase flexibility, strength and endurance. Swimmers and non-swimmers.

PE 171 Water Fitness: Power Swim 1
F,W Prerequisite: PE 167 or equivalent
Aerobic lab swimming for distance and fitness development

PE 181 Social Dance 1
F,W,Sp Prerequisite: None
Mastery of basic skills in movement and step patterns in selected social dancing.

PE 185 Introduction to Modern Dance 1
F,W,Sp Prerequisite: None
An exploration of the modern dance movement and technique to encourage the enjoyment and expression of the art of modern dance. No previous modern dance experience required. *Also listed as DNC 185.*

PE 192 Beginning Folk Dance 1
Sp Prerequisite: None
Basic instruction in folk dance steps and patterns involved in learning dances from foreign countries.

PE 195 Beginning Jazz Dance 1
A Prerequisite: None
An introduction to jazz movement and dance technique to encourage the enjoyment and expression of the art of jazz dance. No previous jazz dance experience required. *Also listed as DNC 195.*

PE 202 Beginning Yoga 1
A Prerequisite: None
An introduction to Hatha Yoga stretching, breathing, and relaxation techniques. Class is geared toward stress management.

PE 203 Intermediate Yoga 1
A Prerequisite: PE 202 or equivalent
Further instruction in Hatha Yoga techniques.

PE 212 Beginning Karate 1
A Prerequisite: None
Instruction in the martial art of Karate. Basic techniques and skills, body conditioning, and self defense movements.

PE 213 Intermediate Karate 1
W,Sp Prerequisite: PE 212 or permission of instructor
A continuation of PE 212 with emphasis on more advanced levels of skills, body conditioning, and self defense movements.

PE 262 PE in the Elementary School 3
Sp Prerequisite: None
Designed primarily for elementary education majors. Stresses development of a positive body image, basic movement, exploration, locomotor, and manipulation skills, planning, organizing, and teaching.

PEE 145 Beginning Racquetball 1
A Prerequisite: None
Basic racquetball fundamentals; strokes, shots, safety, strategy, and sportsmanship. Special fee.

PEE 146 Intermediate Racquetball 1
A Prerequisite: PEE 145 or equivalent
Increased levels of proficiency and competition. Special fee.

PEE 153 Beginning Bowling 1
A Prerequisite: None
The correct approach, hand-eye coordination, and follow through, bowling courtesy and terminology. Special fee.

PEE 154 Intermediate Bowling 1
A Prerequisite: PEE 153 or equivalent
Further bowling technique instruction and practice. Special fee.

PEE 155 Advanced Bowling 1
A Prerequisite: PEE 154
In depth individual instruction and higher levels of competitive play. Special fee.

PEE 156 Beginning Golf 1
F, Sp,Su Prerequisite: None
Instruction and practice in grip, stance and swing fundamentals. Covers rules, scoring, and game etiquette. Evaluation of rules and skills. Both driving range and on course time provided. Clubs available. Special fee.

PEE 157 Intermediate Golf 1
F,Sp, Su Prerequisite: PEE 156 or equivalent
Opportunities for additional skill and technique improvement in practice and play. Special fee.

PEE 169 Aquacise 1
A Prerequisite: None
Water exercise program designed to increase flexibility, strength and endurance in impact-free environment. Non-swimmers welcome. Special fee.

PEE 174 Beginning SCUBA Diving 1
A Prerequisite: None
Instruction in basic SCUBA techniques, use of equipment and safety. Taught in an indoor pool. Students must certify independently. Special fee.

PEE 176 Advanced SCUBA Diving 1
F,W,Sp Prerequisite: PEE 174 or permission from instructor
Underwater search patterns, principles of underwater physics, underwater volume and pressure changes, limited visibility diving, and underwater photography. Special fee.

PEE 205 Marksmanship (Rifle) 1
W Prerequisite: None
Safety and handling procedures, shooting positions, sighting and accuracy. Gun rentals may be available. Special fee.

PEE 206 Marksmanship (Pistol) 1
W Prerequisite: None
Handgun proficiency for law enforcement officers. Safety and handling procedures, shooting positions, sighting and accuracy. Gun rentals may be available. Special fee.

PEE 222 Elementary Kayaking 1
Sp,Su Prerequisites: None
This course prepares a person for a first river trip. Background information, kayak skills, and practice time in a swimmiing pool will help build confidence and competence.

PEE 223 Intermediate Kayaking 1
A Prerequisites: Permission of instructor.
This course prepares a person for a first river trip. Background information, kayak skills, and practice time in a swimmiing pool will help build confidence and competence.

PEE 239 Downhill Skiing 1

W *Prerequisite: None*

Designed for beginners, intermediate and advanced downhill skiers. Skiing skills test administered at the last class session. Special fee. Lift ticket is included while you are taking ski lesson.

PEE 240 Cross Country Skiing 1

W *Prerequisite: None*

Instruction on snow track techniques, nordic downhill on chair lifts, telemark lessons, and an avalanche seminar. A day tour is available as the culminating activity. Special fee.

PEE 242 Ice Skating 1

A *Prerequisites: None*

For beginners, intermediate and advanced ice skaters of all ages. Curriculum matches the U.S. Figure Skating Association's "Skate with U.S." program. Designed to provide both recreation and relaxation benefits. Special fee.

PHY 101 Introduction to Physics 5

A *Prerequisite: MTH 101 with a C grade or better*

Survey of general physics covering mechanics, heat, light, sound, electricity and magnetism, and modern physics.

PHY 105 Descriptive Physics 5

A *Prerequisite: None*

A non-mathematical survey course for liberal arts students. A lecture & demonstration class including mechanics, heat, light, sound, electricity, and modern physics, with ample use of films and videos.

PHY 117 Mechanics 5

A *Prerequisite: MTH 106 or ELET 106 with a C grade or better.*

Fundamentals of mechanics and fluid mechanics. Lab included.

PHY 118 Heat, Light, and Sound 5

W,Sp,Su *Prerequisite: PHY 117 with a C grade or better*

Continuation of PHY 117 covering fundamentals of heat, light, and sound. Lab included.

PHY 119 Electricity, Magnetism and Modern Physics 5

Sp,Su *Prerequisite: PHY 118 with a C grade or better*

Continuation of PHY 118 covering fundamentals of electricity, magnetism, atomic structure, chemical bonding, nuclear reactions and crystalline structure. Lab included.

PHY 125 Special Studies in Physical Science 1-2

Sp *Prerequisite: Permission of instructor required*

Special topics in the area of physical science. May be arranged for credit varying from one to two quarter hours. Since the class is individualized, options available are: workshop, seminar, short course.

PHY 127 Descriptive Astronomy *(PS)* 5

A *Prerequisite: None*

A non-mathematical presentation of our knowledge of the content and history of the cosmos from Stonehenge to Voyager and beyond. The course will provide an up-to-date survey of the knowledge of our own solar system, how our sun generates light and heat, and current scientific thought on such subjects as the origin of the universe, quasars, and black holes. Included are field trips to the Hansen Planetarium and the University Observatory.

PHY 171 Engineering Physics I 4

F,W *Prerequisite: MTH 111 with a C grade or better, concurrent with PHY 181*

Fundamental concepts of mechanics.

PHY 172 Engineering Physics II 4

W,Sp *Prerequisite: PHY 171 with a C grade or better, concurrent with PHY 182*

Continuation of PHY 171 covering fundamentals of electricity, magnetism, and sound.

PHY 173 Engineering Physics III 4

F, Sp,Su *Prerequisite: PHY 172 with a C grade or better, concurrent with PHY 183*

Continuation of PHY 171 covering fundamentals of atomic and nuclear physics and light.

PHY 181, 182, 183 Engineering Physics Lab 1

A *Prerequisites: Concurrent with corresponding physics class*

Lab series which coincides with engineering physics lecture class.

PHY 274 Physics for Scientists and Engineers 3

W *Prerequisites: MTH 292, PHY 173*

Introductory modern physics including wave-particle duality, basic atomic physics based on the vector model, bonding in molecules and solids, kinetic theory.

POLI 101 Introduction to Political Science 3

F *Prerequisite: None*

Approach to political inquiry; origin, nature, function, and forms of the state. Review of the aspect of the relations between states.

POLI 102 Group Decision Making 3

F,W,Sp *Prerequisite: None*

A course in which the individual learns the dynamics of group decision making in an orderly and efficient manner with special attention to the legislative process. (Intercollegiate assembly preparation)

POLI 105, 106, 107 Leadership 1-2

F,W,Sp *Prerequisite: Permission of instructor.*

Survey of leadership skills, including delegating, motivating, problem solving, and goal setting with emphasis on personal growth including communication, time management, self-esteem, and stress management skills. Practical experience through administration and organization of student activities and programs.

POLI 110 American National Government 5

A *Prerequisite: None*

A study of the Constitution and branches of the national level of governments and the history of the development of government in the United States.

POLI 111 State and Local Government 5

Sp *Prerequisite: None*

Establishment, structure, function, and process of state and local governments and political subdivisions such as school districts.

POLI 200 Political Science Cooperative Education 3-6

A *Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.*

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning in the job and the program major.

POLI 216 Politics in Action 3

TBA *Prerequisite: PS 110 or PS 111*

Participation in the actual political process. Students will actively participate in the campaign of their choice.

POLI 220 Introduction to Comparative Politics 5

Sp *Prerequisite: PS 110*

An analysis of structure, function, processes and roles in various political systems. Systems discussed are: democracy, communism, fascism, socialism.

POR 101 Beginning Portuguese I 5
TBA *Prerequisite: None*
First quarter beginning Portuguese focuses on basic grammatical and phonological patterns of modern Portuguese through conversation, comprehension exercises and readings.

POR 102 Beginning Portuguese II 5
TBA *Prerequisite: POR 101 or permission of instructor.*
Second quarter beginning Portuguese expands the skills of students with more extensive grammar and speaking exercises through conversation and readings.

POR 103 Beginning Portuguese III 5
TBA *Prerequisite: POR 102 or permission of instructor.*
Third quarter beginning Portuguese furthers the communication skills of students with exercises and readings designed to develop an understanding of more complex grammar structures and idioms.

PRT 101 General Printing 7
A *Prerequisite: None*
Introduction to printing industry and all of the available areas of employment. Actual hands on experience in DeskTop Publishing, camera work, stripping, plate making and press operation.

PRT 102 Layout & Paste-up Production 3
W,Su *Prerequisite: None*
Layout and paste-up used in industry, with hands on experience. Both traditional and state-of-the-art techniques.

PRT 103 DeskTop Publishing Design 3
F,Sp *Prerequisite: None*
Current trends in design unique to desktop publishing. Students design brochures, business cards, letterhead and business documents.

PRT 104 Beginning PageMaker 3
A *Prerequisite: OIS 107 or equivalent*
Beginning techniques using the PageMaker program. The use of tool box, line text, editing, etc.

PRT 105 Beginning DeskTop Publishing 5
A *Prerequisite: None*
Advanced techniques using templates, master pages, importation of text and graphics, in addition to basic program operation.

PRT 106 Beginning XPress 3
F,Sp *Prerequisite: None*
Beginning operation of Quark XPress, including text and graphic capabilities. Save functions for other programs and importation from other documents.

PRT 108 Microsoft Word & Other Word Processing Programs 3
W,Su *Prerequisite: OIS 107 or equivalent.*
Basic word processing techniques and the use of Microsoft Word and other word processing systems for importation to pagination functions.

PRT 109 Beginning Freehand 3
W,Su *Prerequisite: None*
Explores the basic drawing and type capabilities of this program for use in the DeskTop publishing and printing field. The use of text and graphics. Save functions for importation to pagination functions.

PRT 110 Advanced Freehand 3
F,Sp *Prerequisite: PRT 109 or PRT 105.*
Advanced illustration and applied typography. Comprehensive ad layout production, business forms, and other documents.

PRT 111 Beginning Illustrator 3
W,Su *Prerequisite: PRT 105.*
Builds from no previous computer experience and teaches use of design and advertising software and techniques for use in marketing, public relations, printing, publishing, and business.

PRT 112 Advanced Illustrator 3
F,Sp *Prerequisite: PRT 111*
Advanced illustration and applied typography. Comprehensive ad layout production, business forms, and other documents.

PRT 113 MacDraw, SuperPaint and Other Programs 3
W,Su *Prerequisite: OIS 107 or equivalent*
The uses of a variety of draw type programs. Creating text and graphic combinations for the DeskTop publishing and printing industries.

PRT 114 Scanner Applications 3
F,Sp *Prerequisite: PRT 105*
The use of scanners to import text and graphics into the computer. Editing of photographs and altering of images. Legal ramification to such uses of the computer.

PRT 115 Multi-Media Applications 3
W,Su *Prerequisite: PRT 105*
Introduction to output devices including modem transfer to linotronics, ouput to slides, video and the transfer of copy created on computers directly to offset plates or other reproduction processes. The ability to create and write interactive software in the desktop programming arena will also be explored.

PRT 116 Advanced Imaging Techniques 3
W,Su *Prerequisite: PRT 105*
Advanced uses of the computer to generate graphics and other kinds of images, includes color scanning, color separations, input and output to video, animation, presentation graphics and the creation of interactive programs in the desktop video and desktop programming areas.

PRT 117 Beginning Camera 5
W,Su *Prerequisite: PRT 101*
The use of the camera for pre-press work including line shots on negatives and PMT materials. Enlargement and reduction calculations and exposures.

PRT 118 Advanced Camera 5
F,Sp *Prerequisite: PRT 117*
Half toning procedures on both film and PMT materials. Duotone shots, contact prints and a variety of other camera techniques. Theory of four color printing process.

PRT 119 Beginning Stripping & Plate Making 5
W,Su *Prerequisite: PRT 101*
Basic stripping techniques for business cards, envelopes and other standard sized work for small duplicating type presses. Simple color separations. Plate making and use of register pins.

PRT 120 Advanced Stripping & Plate Making 5
F,Sp *Prerequisite: PRT 119*
Use of registration pins and multiple negative stripping in commercial printing. Four color process stripping and plate making. Use of rubylith and mylar. Screen burning.

PRT 121 Beginning Quick Printing 5
W,Su *Prerequisite: PRT 101*
Handling of quick print art work and use of quick print camera. Special chemistry and development of electrostatic and silver master type plates. How to produce quality work on Itekand ABDick Presses.

PRT 122 Advanced Quick Printing 5
F,Sp *Prerequisite: PRT 121*
Two-color work and other advanced quick printing techniques using Davidson and Chief presses.

PRT 123 Beginning Commercial Printing 5
W,Su *Prerequisite: PRT 101*
The use of metal plates for commercial quality printing.

PRT 125 Intermediate Commercial Printing 5
F,Sp Prerequisite: PRT 123
Two and four color printing using T-head and registration tables on ABDick and Davidson presses.

PRT 126 Advanced Commercial Printing 5
W,Su Prerequisite: PRT 125
Operation of Heidelberg Kord.

PRT 127 Binding and Finishing 3
F,Sp Prerequisite: None
A variety of skills in the binding and finishing end of the printing industry including, stapling, folding, collating, paper calculations.

PRT 128 SLCC Press Internship 10
TBA Prerequisite: All certificate requirements completed
The production of printing-related jobs for departments on the SLCC Redwood Road campus.

PRT 135 Advanced PageMaker 3
F,Sp Prerequisite: PRT 104, PRT 105
Advanced techniques using templates, master pages, importation of text and graphics in addition to basic program operation.

PRT 137 Advanced XPress 3
W,Su Prerequisite: PRT 106
Advanced functions in Quark XPress including advanced graphic text configurations and work with type.

PSY 101 General Psychology *(SS)* 5
A Prerequisite: None
Basic survey psychology course emphasizing common problems of life. Units include studies of childhood growth and development, personality formation, learning theory, motivation and adjustment, and physiological psychology.

PSY 140 Personal Growth and Development 3
F,W,Sp Prerequisite: None
Introduction to the psychology of adjustment with emphasis on both normal and abnormal adjustment patterns. Combines solid, research-based theory with personal applications. Designed for a sensitive understanding of self; explores techniques for better adjustment and an understanding of the effects of our behavior on others.

PSY 150 Human Growth and Development *(SS)* 5
A Prerequisite: None
Fundamentals of growth and development relating to effective human relationships within the family; study of behavior and cultural influences from infancy through adulthood.

PSY 200 Psychology Cooperative Education 3-6
A Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.
Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning in the job and the program major.

PT 110 Principles of Technology I 4-5
A Prerequisite: MTH 099 or equivalent
A carefully integrated hands-on physics course. Includes general physics topics which emphasize practical and lab applications. Offered to vocational technical students.

PT 111 Principles of Technology II 4-5
A Prerequisite: PT 110
A continuation of PT 110. Continues with selected physics topics.

PTM 110 Principles of Technology I 4
TBA Prerequisite: None
A carefully integrated hands-on physics course. Includes general physics topics which emphasize practical and lab applications. Offered to vocational/technical students.

REE 101 Introduction to Real Estate 5
F,W,Sp Prerequisite: None
Instruments of conveyance, security instruments, legal descriptions, plat maps and plans. Both REE 101 and REE 153 are needed to meet the State Real Estate Licensing requirements.

REE 153 Real Estate Law 3
F,W,Sp Prerequisite: None
Legal descriptions, principles of title, ownership and transfer, joint tenants, and tenants in common. Documents of conveyance, security instrument, notes and contracts, liens, foreclosures, and redemptions. Escrows and closings, public records, taxes, assessments, and appeals.

REE 154 Real Estate Recertification 1
TBA Prerequisite: None
This mini-course is designed for those previously licensed real estate agents who are now on "inactive" status. Attend twelve (12) contact hours of REE 101 or REE 153.

REE 162 Commercial Appraisal 3
TBA Prerequisite: None
A class for the professional or interested individual. Basic principles of real property value appraisal reports, site analysis and evaluation. Market area analysis and capitalization.

REE 163 Residential Appraisal 3
TBA Prerequisite: None
For the beginner who is interested in learning more about the appraising field. Also for the person interested in learning appraising fundamentals for personal or business investing.

REF 110 Refrigeration Basic Electricity 5
F Prerequisite: None
Introduction to Ohm's law, power, circuit sizing, magnetism, inductance, transformers, capacitance, impedance, and single 3/phase power with wiring diagrams.

REF 111 Basic Electricity & Heating Lab 5
F Prerequisite: None
Introduction to electrical circuits, single & 3/phase trainers, and wiring techniques.

REF 113 Basic Motors/Controls/Heating 5
F Prerequisite: None
The theory, operation, maintenance, testing, and connecting of motors, basic magnetic controls, and current & voltage relays.

REF 120 Fundamentals of Refrigeration 5
W Prerequisite: REF 110 or Electricity Basic Electricity Certificate.
Development and operation of basic types of refrigeration systems, compression systems and controls, tools and uses.

REF 121 Basic Refrigeration Systems Lab 5
W Prerequisite: REF 111 or Electricity Basic Electricity Certificate.
Refrigerants, domestic refrigerators and freezer systems including building of a complete individual system.

REF 123 Refrigeration Systems 5
W Prerequisite: REF 113 or Electricity Basic Electricity Certificate.
Characteristics and uses of different types of refrigeration systems.

REF 130 Refrigeration Wiring & Controls 5
Sp Prerequisite: REF 120
Requirements for wiring the power service, wiring and adjustment of basic refrigeration and air-conditioning controls. Applicable National Electric Code.

REF 131 Commercial Service 5
Sp Prerequisite: REF 121
Air conditioning, heating and humidifying, cooling and dehumidifying, cooling systems, controls and instructions. Installation of equipment.

REF 133 Automatic Control Systems 5
Sp Prerequisite: REF 123
Theory and application of control systems used in all types of refrigeration systems.

REF 147 Math Basics for Refrigeration 5
F Prerequisite: None
Review of fractions, decimals, percents, powers, use of calculator, reciprocals, square roots, circumference, areas, square inches, circular mils, volumes, ratios, proportions, and electrical applications of algebraic equations with one unknown.

REF 200 Refrigeration Cooperative Education 3-6
A Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.
Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major.

REFF 050 Electrical for Refrigeration and Heating 0
F Prerequisite: None
A study of basic electricity, electrical controls, motors, heating theory and heating systems. Students will receive practical experience through hands-on experiments using the light bulb trainers and furnaces.

REFF 051 Basic Refrigeration Theory for Domestic Refrigeration 0
W Prerequisite: REFF 050
A study of basic refrigeration theory, piping techniques and brazing. The student will learn the theory of domestic refrigeration and controls and gain practical experience on domestic refrigeration systems.

REFF 052 Advanced Heating and Air Conditioning I 0
Sp Prerequisite: REFF 051
An extension of REFF 051, including commercial controls and central air conditioning. The theory and practical application of domestic and light commercial refrigeration systems, air conditioning and rooftop units.

REFF 053 Advanced Heating and Air Conditioning II 0
Su Prerequisite: REFF 052
A study of commercial controls, central air conditioning systems, walk-in refrigeration boxes, ice makers, and rooftop units. Includes theory and application.

RUS 101 Beginning Russian I 5
TBA Prerequisite: None
First quarter beginning Russian focuses on basic grammatical and phonological patterns of modern Russian through conversation, comprehension exercises and readings.

RUS 102 Beginning Russian II 5
TBA Prerequisite: RUS 101 or permission of instructor
Second quarter beginning Russian expands the skills of students with more extensive grammar and speaking exercises through conversation and readings.

RUS 103 Beginning Russian III 5
TBA Prerequisite: RUS 102 or permission of instructor
Third quarter beginning Russian furthers the communication skills of students with exercises and readings designed to develop an understanding of more complex grammar structures and idioms.

SETT 101 Supported Employment Training 3
TBA Prerequisite: None
Fundamentals of successful job coaching. Helping individuals with severe disabilities and severe on-going mental illness find employment in the community. Training these people to succeed on the job.

SETT 200 Supported Employment Cooperative Education 3
TBA Prerequisite: SETT 101
Supervised work experience in a business related to the program. Credit awarded for successful completion of learning objectives that provide new learning related to the job.

SEVT 110 2 & 4 Cycle Engine Repair Lab 7
F Prerequisites: Concurrent with SEVT 111
Procedures and practices used in repairing small 2 and 4-cycle and small multi-cylinder industrial engines.

SEVT 111 2 & 4 Cycle Engine Repair Theory 5
F Prerequisites: Concurrent with SEVT 110
Procedures and practices used in repairing small 2 and 4-cycle and small multi-cylinder industrial engines.

SEVT 120 Snowmobile & Motorcycle Lab 7
W Prerequisites: SEVT 110, SEVT 111; concurrent with SEVT 121
Service, overhaul, and maintenance operations used in snowmobile and motorcycle engines, transmissions, chassis, and chain saws. **NOTE:** Credit for this course may be earned through Cooperative Education.

SEVT 121 Snowmobile & Motorcycle Theory 5
W Prerequisites: SEVT 110, SEVT 111; concurrent with SEVT 120
Principles of operation of 4-cycle engines and high performance 2-cycle engines, multi-speed constant mesh gear transmissions, belt transmissions, carburetion systems, lubrication systems, dynamometer operations, and chain saw operations.

SEVT 130 Outboard Motor & Drive Systems Lab 7
Sp Prerequisites: SEVT 110, 111, 120, 121; concurrent with SEVT 131
Practices used to tune, maintain, overhaul, store, and rig outboard motors, transmissions, and lower units. Credit for this course may be earned through Cooperative Education.

SEVT 131 Outboard Motor & Drive Systems Theory 5
Sp Prerequisites: SEVT 110,111,120,121; concurrent with SEVT 130
Principles of operation of multi-cylinder 2-cycle engines, drive systems, transmissions, magnetos, and carburetion used in outboard motors.

SEVT 192 Specialty Training 5-12
A Prerequisite: None
A course designed to help students obtain training to develop a special skill for a specific job in industry, *With approval of the administrator, may be used for 5-12 credits in the certificate program.*

SOC 101 Introduction to Sociology 5
A Prerequisite: None
The nature and scope of sociology, including systematic treatment of group life, social institutions, social problems, social change and social control.

SOC 138 The Sociology of Marriage and Family 4
W Prerequisite: SOC 101 or equivalent or permission
The nature of marriage and family as an institution in society. Consideration of issues such as gender roles, mate selection systems and changing family forms. Includes cross-cultural comparisons.

SOC 160 Current Social Issues in America 5
Sp Prerequisite: SOC 101 or equivalent or permission
The application of sociology to the study of social issues of particular concern in contemporary society.

SOC 200 Sociology Cooperative Education 3-6
Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.
Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning in the job and the program major.

SOC 228 Alcohol/Drug Abuse and the Community 3
A Prerequisites: None
An historical perspective on alcohol and drug abuse and its impact on the community. The impact of alcohol/drug abuse on society as a whole, on the family unit, and on specific subgroups. The impact and economics of treatment and prevention.

SOCC 111 Introduction to Research Methods 5
TBA Prerequisite: None
Application of measurements and research methodology to social data.

SOCC 220 Social Psychology 3
W,Sp Prerequisite: SOC 101
Problems of identification and strain involved in participation of persons in groups.

SOCC 232 Work and Society 4
TBA Prerequisite: SOC 101
Sociological analysis of occupations and professions in industrial and post-industrial societies, occupational contexts and cross-cultural comparisons. Utilizes seminar/discussion format.

SOCC 250 Sociology of the Native American Community 3
F Prerequisite: SOC 101
An introduction to the sociology of Native Americans, both from a modern and a historical perspective. Topics include self-concept, family relations, stereotypes, public policy, urbanization, the reservation, and community.

SOCC 258 Asian-American Experience 3
Sp Prerequisite: SOC 101
An examination of the Asian-American experience from historical, cultural, psychological, social and political perspectives. Focuses on past and present and emphasizes commonalities and similarities in the experiences of different Asian-Ameican groups. Ethnic identity, stereotypes, literature, family relations, and communities.

SOCC 263 Ethnic Minorities in America 3
TBA Prerequisite: SOC 101
Role of ethnic and racial minorities in the United States and the process which arises when groups of people who differ come into contact with each other.

SOCC 266 Sociology of the Black Community 3
W Prerequisite: SOC 101
Introduction to sociology of Black Americans discussing topics of the issues of race, race consciousness, identity, self-concept, public policy, and family relations. Taught from the perspective of past and present Black Americans.

SOCC 267 Mexican/American Groups 3
TBA Prerequisite: SOC 101
Brief survey of Mexican-American history and examination of the socioeconomic position of the Mexican-American people in Utah and the nation. Utilizes seminar/discussion format.

SOCC 268 Sociology of Aging 3
W Prerequisite: SOC 101
Problems concerning the social role of the aged in industrial societies. Introduces the student to the general field of aging. Biological, psychological, and sociological aspects of aging will be emphasized.

SOCC 269 Sociology of Poverty 3
Sp Prerequisite: SOC 101
Causes of poverty, characteristics of groups living in poverty and programs designed to reduce poverty.

SOCC 272 Sociology of Mental Health 4
TBA Prerequisite: PSY 101
Social processes involved in the onset and individual treatment of mental health problems. Individual counseling and theories and techniques applicable to intentional counseling of the mentally ill. Utilizes seminar/discussion format.

SOCC 275 Ethics and the Professional 3
F,W Prerequisite: SOC 101 and permission from program coordinator
An examination of moral, ethical and legal questions that confront human service workers. Taught by human service professionals and legal advisors, topics will include confidentiality, state statutes and standards, government regulations, child abuse and neglect, duty to warn, subpoenas, power of state and individual, liabilities, and other pertinent issues of the law.

SOCC 292 Practicum in Applied Sociology 3
TBA Prerequisite: This class for Human Service Majors only
Designed to give the student practical experience in applying technical insights by participating with faculty and other professional personnel in demonstration studies, evaluations and projects in community and state agencies and in social service settings.

SOCC 293 Sociology Internship 1-5
A Prerequisite: SOC 101, permission from EMHHS program coordinator, sophomore standing, and at least a 2.0 GPA.
Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning in the program major. Work experience can be either paid or volunteered.

SPN 101 Beginning Spanish 5
A Prerequisite: None
First quarter Beginning Spanish will focus on basic grammatical and phonological patterns of modern Spanish through conversation, comprehension, exercises, and readings.

SPN 102 Beginning Spanish II 5
A Prerequisite: SPN 101 or permission of instructor
Second quarter Beginning Spanish will expand the skills of students with more extensive grammar and speaking exercises through conversations and readings.

SPN 103 Beginning Spanish III 5
A Prerequisite: SPN 102 or permission of instructor
Third quarter Beginning Spanish will further the communication skills of students with exercises and reading designed to develop an understanding of more complex grammar structures and idioms.

SPN 125 Special Studies in Spanish 1-3
Su Prerequisite: Permission of the department
Special studies in language or culture. Students plan their areas of study or travel and work with the instructor on an individualized basis.

SPN 201 Intermediate Spanish 5
F Prerequisite: SPN 103 or equivalent
Second year Spanish reviews grammatical structures with emphasis on comprehension and speaking while increasing focus on reading and writing skills involving materials taken from Spanish Literature.

SPN 202 Intermediate Spanish II 5

W Prerequisite: SPN 103 or equivalent

Second year Spanish reviews grammatical structures with emphasis on comprehension and speaking while increasing focus on reading and writing skills involving materials taken from Spanish Literature.

SPN 275 Introduction to Spanish Literature 5

Sp Prerequisites: SPN 103 or equivalent

Helps fluent speakers expand their reading, writing, and comprehension skills through selections from Spanish literature.

SS 125 Special Study in Social Science 1-2

TBA Prerequisite: Permission of instructor.

Special topics in the areas of history, psychology, sociology, political science or economics. May be arranged for variable credit. Since the class is individualized, options are: workshop, seminar or short course.

SS 228 Alcohol/Drug Abuse and the Community 3

A Prerequisite: PSY 101 or SOC 101

This course will provide a historical perspective on alcohol and drug abuse and its impact on the community. The impact of alcohol/drug abuse on society as a whole, on the family unit and on specific subgroups, and finally, the impact and economics of treatment and prevention.

SURG 100 Medical/Surgical Technology 1

F Prerequisites: Acceptance into Surgical Technical Program

Basic medical terminology; also terminology in surgical equipment and environment.

SURG 101 Introduction to Surgical Theory 6

F Prerequisite: Acceptance into Surgical Technical Program.

Principles of career orientation, medical/surgical supplies and equipment, handling and care of medical/surgical supplies and equipment, surgical patient preparation, aseptic technique and introduction to the working environment.

SURG 112 Surgical Theory I 6

W Prerequisite: SURG 101

Principles of theory and procedures in the operating room, review of operation room set-up, circulating duties, drugs and anesthesia, basic surgical procedures related to the systems of gastrointestinal, reproductive and urinary.

SURG 113 OR Clinical Experience I 8

W Prerequisite: SURG 101

SURG 113 is a cooperative education work experience in a clinical health facility under the direct supervision of personnel in the facility. The student is required to complete specific predetermined learning objectives relating to surgical techniques.

SURG 122 Surgical Theory II 7

Sp Prerequisite: SURG 112

Principles of theory and procedures in the operating room related to special senses, musculoskeletal, cardiovascular, respiratory, nervous systems, pediatric surgery, and plastic/reconstructive surgery.

SURG 123 OR Clinical Experience II 8

Sp Prerequisite: SURG 113

SURG 123 is a cooperative education work experience in a clinical health facility under the direct supervision of personnel in the facility. The student is required to complete specific predetermined learning objectives relating to surgical techniques.

SVTT 101 Introduction to Surveying 2

TBA Prerequisite: None

Historical tour of surveying from its beginnings to the present. This course will emphasize mathematical and technological progress as well as the role of surveyors in the beginning of America.

SVTT 102 Public Land Survey System 3

TBA Prerequisite: SVTT 101

A detailed study of the sectionized land system. General and special instructions, lost and obliterated corners, single and double proportion, monumentation.

SVTT 103 Surveying Field Techniques 5

TBA Prerequisite: None

Limited hands on experience with survey equipment. Horizontal traverse, levels, distance measuring, layout techniques, field notes, etc.

SVTT 200 Small Equipment/Vehicle Cooperative Education 8

A Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.

Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning in the job and the program major.

SVTT 201, 202, 203 Surveying Math 4, 4, 4

TBA Prerequisites: MTH 101, 105,106

Three quarters of 4 credit hours each. Survey application of algebra and trigonometry. Bearing systems, elevations, traverse, error propagation, adjustments, horizontal curves, vertical curves, areas, subdivision calculations, intersections, state plane coordinates, astronomical calculations, volumes.

SVTT 204 Control Surveys 4

TBA Prerequisite: SVTT 201

Accuracy levels and the field procedures used to obtain them. Calculation techniques for control networks. Triangulation, trilateration, and transit traverse.

SVTT 205 Legal Descriptions 4

TBA Prerequisites: SVTT 102, 201

Writing and understanding legal descriptions. Latent and patent ambiguities, basis of bearing, and interpretation of terms.

SVTT 206 Ethics and Liability 3

TBA Prerequisite: None

A study of professional practice with emphasis on survey liability case studies.

SVTT 207 Land Boundary Law 5

TBA Prerequisite: SVTT 205

Rules of evidence, senior and junior rights, deeds, unwritten title transfer, unwritten rights, statute law, advisory law.

SVTT 210 Land Development 4

TBA Prerequisite: SVTT 201

Land planning techniques used in residential and commercial development. Subdivision, condominiums, cluster housing, industrial parts, and commercial complexes. Approval procedures.

SVTT 211 Photogrammetry 4

TBA Prerequisite: SVTT 201

Photo identification, stereographic interpretation, geometry and measurements from aerial photography.

SVTT 212 Land Information Systems 4

TBA Prerequisite: None

Computerized information networks relating to land use. Graphic layering systems. Case studies of various systems in use currently.

SVTT 213 Public Records 4

TBA Prerequisites: SVTT 205, 207

A study of public records relating to land and law. Tours of local records systems and law libraries and how to use them.

SVTT 214 Survey Instrumentation 4
TBA *Prerequisites: SVTT 103*
Care and maintenance of survey instruments. A look at advanced instrumentation with demonstrations of the latest instrument technology and the principles they are based upon.

SVTT 215 Running a Survey Business 4
TBA *Prerequisites: None*
Basic principles for running any service oriented small business. Financial and accounting techniques, client relations, record keeping and filing techniques.

TECH 101 Technology and the Citizen *(INT)* 5
F,W,Sp *Prerequisite: None*
A survey of various aspects of technology that affect our every day lives. A general overview of specific topics involving new, creative approaches to technological problems surrounding the average citizen.

THE 101 Survey of Theater 5
A *Prerequisite: None*
A survey of western theater from its beginnings in ancient ritual to the contemporary, modern theater. Students will learn to understand and appreciate the role of theater in the development of modern thought, culture, politics and society.

THEE 105 Introduction to Film 4
A *Prerequisite: None*
This course introduces students with no previous film training to the historical, technical and aesthetic developments of film. Citizen Kane, Victor Victoria, African Queen, Nosferatu, and others will be examined. Students should be aware that some materials presented are R-rated. *Also listed as FLMM 105*

THEE 107 Ethnic & Minority Film Studies 4
TBA *Prerequisite: None*
This course is intended to raise cultural awareness through an aesthetic, critical and interdisciplinary examination of ethnic and minority film and its evolution. Some films may be considered controversial and may carry an R-rating. *Also listed as FLMM 107*

THEE 111 Basic Acting I 3
A *Prerequisite: None*
An introduction to the basic aspects of the acting process which are brought together in performance situations. Emphasis is placed on the development of the individual's acting ability, and is nurtured through exercises in pantomime, improvisation, and techniques of acting.

THEE 112 Basic Acting II 3
A *Prerequisite: THEE 111 or permission of instructor.*
A continuation of THE 111. Emphasis is placed on increasing the students' stage skills and development of characters.

THEE 114 Basic Acting III 3
TBA *Prerequisition: THEE 112*
A continuation of THEE 112 with an emphasis on scene study, play analysis and fundamentals of directing.

THEE 125 Special Projects in Theater 1-4
A *Prerequisite: Consent of instructor*
Individual projects that will allow a student to pursue specific educational objectives that will contribute to his/her personal development in theatre arts.

THE 214 Critical Analysis of Film 4
TBA *Prerequisite: THEE/FLMM 105 or 107*
An in-depth exploration of the critical aspects of film including aesthetic and technical developments that have influenced film from its inception to the present day. Students will view key films. Some R-rated films will be presented. *Also listed as FLMM 214.*

THE 220 History and Analysis of Musical Theater 3
TBA *Prerequisite: THEE 111, or permission.*
An exploration of the artistic aspects of musical theater through an examination of its dimensions of style and form.

TRAA 191 Domestic Travel and Ticketing 3
F,Sp *Prerequisite: None*
Use of Domestic OAG constructing itineraries, writing tickets, MCO's, PTA's fare construction, learning airline/city codes. Car and hotel reservations. General travel agency procedures.

TRAA 192 International Travel and Ticketing 3
W,Su *Prerequisites: TRAA 191, TRAA 196*
An overview of international tariff training. Use the International OAF in making itineraries and tickets. Also studied will be cruises, rail travel and group tours.

TRAA 193 Travel Sales 3
F,Sp *Prerequisites: TRAA 191, TRAA 196 or concurrent with TRAA 191 & TRAA 196.*
A study of successful sales techniques as well as help with preparation of a resume and skills for job interviews.

TRAA 194 Computer Training 3
W,Su *Prerequisites: TRAA 191, TRAA 196*
A course introducing computer training on a reservation system. Become familiar with the terminology and capabilities of this system as well as fundamental formats and entries for passenger reservations.

TRAA 195 Travel Accounting 2
W,Su *Prerequisite; TRAA 191*
Basic accounting required for travel industry personnel.

TRAA 196 Domestic Geography 3
F,Sp *Prerequisite: None*
Geography class with an orientation toward a travel career. Included will be studies of cultures, religions, peoples and their traditions along with the tourist attractions.

TRAA 197 International Geography 3
W,Su *Prerequisite: TRAA 196*
Worldwide geography class with an orientation toward a travel career. Included will be studies of cultures, religions, and political situations, Course includes all documentation requirements.

TRM 101 Introduction to Distribution Systems 3
A *Prerequisite: None*
Principles and practices of transportation inflow, outflow, warehousing and their role in the larger physical distribution process. Designed as a foundation course for the transportation major and as a practical examination of business logistics for all business students.

TRM 200 Transportation Management Cooperative Education 3-6
A *Prerequisites: Sophomore standing with a minimum GPA of 2.0, study-related employment involving at least 20 hours per week on the job, and permission of the Director of Cooperative Education or a member of his staff.*
Supervised work experience in a business, industrial, or government environment related to program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major.

TRM 201 Carrier Management 5
F *Prerequisite: TRM 101 (may be taken concurrently)*
Organization and management for transportation carriers, with consideration given to finance, personnel, traffic, operations, marketing, and contract negotiation.

TRM 202 Transportation Economics 3
Sp *Prerequisite: ECN 201*
Economic theory as applied to location of economic enterprise, transportation service, transportation pricing, logistics, management and public policy. In depth analysis of government regulation of transportation.

TRM 205 Logistics Management 5
W, Prerequisite: TRM 101
Management of logistics with emphasis on the shipper point of view. Consideration given to traffic management, warehouse management, rates, tariffs, routing, loss and damage, location, concepts and contract negotiation.

TRM 210 Carrier Management 5
F Prerequisite: TRM 101
Organization and management for transportation carriers, with consideration given to finance, personnel, traffic operations, marketing and contract negotiations.

TRM 212 Risk and Loss Management 5
Sp Prerequisite: TRM 101
Procedures for filing loss and damage claims. Transportation contracts for various transport modes including carrier and shipper liability. Risk strategy and loss avoidance procedure in transportation management.

TRM 299 Current Topics in Transportation 1-5
TBA Prerequisite: Variable to topic or project
This course will vary from quarter to quarter, but will present a forum where the student will be introduced to topics of current interest and demand in the field of transportation. Topics relevant to the transportation student will be introduced to enhance preparation for work and/or continued study in transportation. A special project is required.

WLD 104 Basic Metal Sculpturing 3
F,W,Su Prerequisite: None
Hands-on training in the use of welding equipment. Basic skills and safety necessary to create small art projects as approved by instructor.

WLD 105 Related Welding 3
F,W,Sp Prerequisite: None
Basic principles of arc and acetylene welding including flat and horizontal welds; also brazing and cutting techniques.

WLD 107 Basic Arc and Acetylene Welding 6
F,W,Sp Prerequisite: None
Fundamentals of Shielded Metal Arc Welding (SMAW) and oxyacetylene welding including cutting and brazing.

WLD 108 Welding Light Gauge Metals 3
F Prerequisite: None
Theory and practice of welding light gauge steel using the Shielded Metal Arc Welding (SMAW) and Gas Metal Arc Welding (GMAW) processes.

WLD 111 Fundamentals of Welding 5
F,W Prerequisite: Concurrent with WLD 112
Basic theory of the oxy-acetylene process, basic theory of arc welding electricity and arc welding machines and equipment. Theory of general welding procedures for mild steel.

WLD 112 Welding Practices I Arc and Acetylene Lab 7
F,W Prerequisite: Concurrent with WLD 111
Application of principles taught in WLD 111. These include arc welding in all positions of fillet welds on mild steel, also acetylene welding.

WLD 121 Theory of Welding and Cutting 5
W,Sp Prerequisites: WLD 111-112; Concurrent with WLD 122
Theory of cutting procedures and cutting methods. General welding procedures of mild steel in all positions. Complete study of electrodes and filler metals. Theory of PLASMA and CNC cutting.

WLD 122 Welding Practices II Arc and Acetylene Lab 7
W,Sp Prerequisites: WLD 111-112; Concurrent with WLD 121
Application of principles described in WLD 121. Application of cutting methods and arc welding practice of fillet and groove joints in all welding positions. Acetylene welding of pipe.

WLD 130 Welding Practices III Arc and Acetylene 7
Sp,Su Prerequisites: WLD 111-112; Concurrent with WLD 131
Shielded metal arc welding of butt joints in all positions and large fillet weld practice. Physical testing and inspection of welds. Metal fabrication projects. Braze welding.

WLD 131 Theory Applications of Welding 5
Sp,Su Prerequisites: WLD 121-122; Concurrent with WLD 130
Theory of properties of metals. Familiarization with welding terminology and application of major weld joints. Emphasis on welding safety. Procedures of welding and testing of mild steel weldments. Also basics of braze welding.

WLD 141 Blueprint Reading for Welders 5
Sp,Su Prerequisite: None
Basic study of blueprint reading and drawing. Special study of pipe symbols, welding symbols, and layout work.

WLD 148 Math for Welders II 5
W,Sp Prerequisite: IND 147
Continuation of welding math requirements covering rules and formulas, length, surface, volume, and angular measurement, metric measurement and geometric constructions. Applied to welding fabrication.

WLD 192 Specialty Welding Training 7
F,W,Sp Prerequisite: None
A theory and lab course designed to help students to obtain the necessary training to obtain the skills required for a specific welding job or certification. *May be used for seven credits in the diploma program.*

WLD 214 Wire Feed Process (Lab & Theory) 7
F,W Prerequisites: WLD 130, 131
Theory and practice of Gas Metal Arc Welding (GMAW), Flux Cored Arc Welding (FCAW), and submerged arc welding (SAW) and industrial standards.

WLD 215 Metallurgy of Ferrous Metals 5
F,W Prerequisites: WLD 130, 131
Metallurgy as it relates to the welding of metals which contain iron. Theory and Practice.

WLD 225 Welding Nonferrous Metals 9
F,W Prerequisites: WLD 130, 131`
The theory and practice of welding non-ferrous metals and stainless steel. Emphasis on Gas Tungsten Arc Welding (GTAW and GMAW), with processes used where applicable.

WLD 227 Advanced Blueprint Reading and Quality Control 5
F,W Prerequisit: WLD 141 or equivalent
Reading and drawing of blueprints. Study of non-destructive testing and inspection and their symbols.

WLD 231 Pipe Welding Procedures 2
Sp,Su Prerequisit: WLD 130, 131 or equivalent.
The theory of pipe welding as required by welding codes, American Welding Society (AWS), American Society of Mechanical Engineers (ASME), and American Petroleum Institute (API).

WLD 233 Layout Techniques 3
Sp,Su Prerequisite: WLD 130, 131, or equivalent.
Layout techniques for structural and pipe fabrication.

WLD 234 Applied Fabrication and Pipe Welding 7
Sp,Su Prerequisit: WLD 130, 131, or equivalent.
Welding practice for pipe certification, applied fabrication. Each student completes the fabrication projects and makes repairs as assigned by the instruction. Assignments meet the standards of the industry.

GOVERNANCE AND ADMINISTRATION

Utah State Board of Regents

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Aileen H. Clyde — Springville
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Douglas S. Foxley — Salt Lake City
John B. Goddard — Ogden
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Karen H. Huntsman — Salt Lake City
Stephanie K. Jessen — Ogden
Michael O. Leavitt — Salt Lake City
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Clifford S. LeFevre — Clearfield
Paul Rogers — Salt Lake City
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Jay B. Taggart — Ogden
Dale O. Zabriskie — Salt Lake City

SLCC Institutional Council

Dr. Joan Burnside (Chairperson) — Magna
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Mike Boley — West Valley City
Dale Ensign — Salt Lake City
Val Finlayson — Salt Lake City
Barbara J. Haslam — Salt Lake City
Duayne T. Johnson — West Valley City
Michael N. Martinez — Salt Lake City
F. Warren Nuesmeyer — Magna
Shawn Mehr — (Student Body President)

Salt Lake Community College

Administration

President — O. D. Carnahan
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Business Vice President — Heber T. Hunt
Student Services Vice President — Judd D. Morgan
Exec. Asst. to Pres. — Brent Goodfellow

Staff

President's Office

Admin. Asst. /Sec. — Joyce Cottrell
Asst. to President — Katherine Boswell
Admin. Asst./Sec — Maurine Christopherson
Internal Auditor — Steven C. Hens

College & Public Communications
Director — L. Jay Williams
Secretary — Gwen Simpson
Arts Center Coord. — Pat Davis
Asst. Director — Bryan Gardner
P.R./Marketing Asst. — Margaret Aoki

Development
Director — Peter Maughan
Secretary — Elna Campbell
Grants Coord. — John Fritz
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Title III Proj. Dir. — John Latkiewicz

Office of the Academic Vice President

Admin. Asst./Sec. — Becky Carnahan
Instr. Comp/Prog. Dir. — Marcia Somsen
Scheduling Analyst — Marylyn Garcia
Instr. Operations Dir. — Maria Hundrup
Instr. Staff/Faculty Dir. — Katherine McIntyre
Admin. Asst./Sec. — Colleen Shiner

Library
Librarian — Alex Stecker
Asst. Librarian — Eloise Vanderhooft
Media Specialist — Kelly Weldon

School of Business & Technology

Dean — Dr. Michael Homer
Admin. Asst./Sec. — Sue Elliott

Division of Business Systems
Division Chair — Boyd Warnick
Secretary — Mary Perez

Division of Technology
Division Chair — Wayne Crossen
Admin. Asst./Sec. — Angie Nelsen

School of Continuing and Community Education

Dean — Geoffrey Brugger
Admin. Asst./Sec. — Karen Hoffman

Division of Continuing Education
Division Chair — George Van De Water
Admin. Asst./Sec. — Paula Chappell
Director — Bill Laney
Director — Barbara Pomeranz
Director — Fred Rose

Division of Community Education
Division Chair — John Anjewierden
Admin. Asst./Sec. — La Rae Hart
Director — Lynda Adams
Director — Blair Carruth

Center for Bus. & Economic Dev.
Director — Rand Johnson
Admin. Asst./Sec. — Marquita Gerber
Career Action Center — Jim Godfrey
Ctr. for Entrepr. Trg. — Sterling A. Francom
Cooperative Education — Pat Gardner
Custom Training for Econ. Growth
Director — Ben Mendoza
Coordinator — Rose Defa
Job Service — Sherrill Chapman
Workshops, Sem. & Conf. — Jo Rieber

School of Humanities and Sciences

Dean — John Duran
Admin. Asst./Sec. — Pat Ault

Division of Health & Human Services
Division Chair — Karen Lundberg
Admin.Asst./Sec. — Julie Alexander

Division of Humanities
Division Chair/Title III — Pam Gardner
Admin. Asst./Sec. — Bonnie Sillitoe

Division of Sciences
Division Chair — Dave Ballard
Admin.Asst./Sec. — Joyce Jensen

School of Occupational Education

Dean — Elwood Zaugg
Admin. Asst./Sec. — LaWanna Henderson
Recruiting — John Morgan
Program Innovation Dir. — Edith Mitko
C.A.I. Curriculum Coord. — Mark Lye

Division of Construction & Serv. Ind.
Division Chair — Don Merrill
Admin. Asst./Sec. — Sherrie Brooks

Division of Mechanics
Division Chair — John Udy
Admin. Asst./Sec. — Linda Wendel

Skills Center Operations
Division Chair — Paco Salazar
Admin.Asst./Sec. — Rosa Barnes

Office of the Business Vice President

Admin. Asst./Sec. _____ Kathy Pizzello
Assistant to Vice-President/Dir. of MIS, Planning & Research ____ Robert Beebe
Admin. Asst./Sec. ____ Maurene Williams
Information Analyst ____ Dianne Stireman
Research Analyst _____ Debbie Summers

Accounting Systems
Director _____ Mark Hamilton
Collections _____ LeNae Williams
Payroll _____ Jan Smith

Administrative Services
Director _____ Nancy Sanchez
Purchasing Agent _____ Gunnell Nelson
Buyer _____ Mike Hubbard
Buyer _____ Zeller Waymire

Budget
Budget Director_____ Dana Van Dyke
Budget Analyst _____ Helen Warnick

Business Office
Controller/Bus. Mgr. _____ Kent Ferrel
Admin. Asst./Sec. _____ Mary Evans
Accounts Payable _____ Marian Handy
Asst. Controller _____ Karen Halladay
Revenue Manager_____ Ronald Riddle

Computing Services
Admin. Computer Dir. — Marvin Hawkins
Secretary _____ Valorie Pyjar

Facilities
Director _____ Paul Gundersen
Admin. Asst./Sec._____ Cindy Hand
Crafts Foreman _____ Don Thomson
Grounds Supervisor_____ William Graham
Heating Plant Foreman ____ Val Putnam
Custodian Fore. _____ Ronald Jones
Maintenance Sup._____ Russell Eastman
Manager _____ Eugene Overson

Personnel Services
Director _____ Clark Whitehead
Admin. Asst./Sec._____ Gay Whetman
Personnel Spec._____ Kay Waters

Office of the Student Services Vice President

Admin.Asst./Sec. _____ Laurel Millett

Administrative Services
Director _____ Janet Felker
Alcohol & Drug Ed. _____ Jeff Ross
Data Center Coord._____ Mary Evans
Fin. Aid Director _____ Gayle Norman
Counselor _____ Jeff Johnsen
Counselor _____ Cristi Easton
Counselor _____ Kay Higginson
Specialist _____ Susan Shipman
Registrar _____ Loren Evans
Single Parent/Displaced Homemaker
Director _____ Victoria Garcia-Alarcon
Employment Spec. _____ Janell Tafoya
Counselor _____ Bernadette Astorga
Student Sup. Serv. Dir. ___ Karen Morgan
Counselor _____ Barbara Burkart
Veterans Affairs _____ Randy Swain

Athletics
Director _____ Norma Carr
Campus Rec. Director ____ Craig Forman
Men's Basketball Coach ____ Jeff Menday
Women's Bskt. Coach ____ Jean Widdison
Sports Director _____ Neil Bair

College Center & Auxiliary Services
Director _____ Curtis E. Smout
Admin. Asst./Sec.— Maurine Hendrickson
College Store Director _____ Steve Ferre
Supply Manager _____ Mike Smith
Textbook Manager _____ Sharon Riggs
Food Service Director_____ Robert Price
Asst. Director _____ Ann Cordova
Eve. Asst. Director _____ April Jackman
Operations Mgr. _____ Michael Thurman
Student Act. Director ____ Gordon Wilson

Skills Center Support Services
Director _____ Susan Besser
Admissions Counselor _____ Julie Hoelle
Admissions Counselor __ Mariana Hopkins
Admissions Counselor ____ Chris Walker
Assessment Counselor — Mark McKenzie
Financial Aid _____ Kay Higginson
Handicapped Counselor _____ Jean Sether
Instructional Counselor ___ Philip Anosike
Instructional Counselor ____ Ed Anderson
Instructional Counselor ____ Howard Ingle
Instructional Counselor ____ George Miller
MIS _____ Carrie Riley

Student Planning and Assessment
Director _____ Larry Landward
Admin. Asst./Sec. _____ Nadine Bone
Advising. & Assess. Dir. — Keith Heigert
Academic Advisor ____ Sherrie Davidson
Academic Advisor__Tracy Harris-Belnap
Academic Advisor ____ Gary Kristiansen
Academic Advisor _____ Beth Noyce
Academic Advisor ___ Loraine Ronnfeldt
Academic Advisor _____ Sarah Smith
Academic Advisor _____ Dick Wade
Acad. Standards Director___ John Wiemer
Admissions Director ____ Jane Townsend
Asst. Director_____ Carol Sandoval
Advisor _____ Les Cook
Advisor _____ Vo Belnap

CREDENTIALS

FACULTY

ADAMS, Spencer M. *Associate Professor*, Social Science (1984) Instructor, U. of U., SUNY at Albany; Counselor, SUNY at Albany, SLCC Skills Center; doctoral intern (Psychology) SLC VA Hospital; B.A; M.S.

AGUAYO, Rebecca M. *Assistant Professor*, Health Sciences, Nursing (1990) B.S; M.S. (surgical nursing & education)

ANDRUS, A. Marlon *Assistant Professor*, Finance & Credit (1982) Vice president, branch manager, commercial loan officer, First Security Bank; graduate, American Institute of Banking; graduate, Pacific Coast Banking School, University of Washington; past president, Salt Lake Chapter American Institute of Banking; partner, private investment firm; B.A.

ASH, Ronald *Associate Professor*, Electronics Technology (1985) Program manager, electronics faculty, Central Texas College, Europe Campus; instructor, Pikes Peak Community College, Las Cruces Community College, USFI, Far East; B.S.

ASHDOWN, Robert C. *Professor*, Manufacturing Technology (1972) Tool and die maker, C.M. Roestenburg & Sons, Dynapac; machinist, EIMCO, Euteck; teacher, Davis School District; A.S; B.S; MIE; T&I.

AYLETT, Maureen *Professor*, Office Information Systems (1977) Instructor, SLC District; secretary, Utah Department of Public Safety; T&I; C.P.S; B.S; M.S.

BADGER, Vince *Assistant Professor*, Automotive Technology (1981) Mechanic, Luff Motor Co, Goodyear Tire Co.; A.S.E. Certificate, A.A.S. (auto mechanics); diploma, A.A.S. (auto body repair and paint).

BAIRD, Brett E. *Instructor*, Ford ASSET program (Automotive Technology (1989) A.S.E. certified; technician, director of training, Tunex International, Inc.

BAKER, Joseph J. *Assistant Professor;* Electronic Technology (1964) Supervisor, Sperry Utah; senior technician, LDS Hospital, Bio-Physics lab at U of U, M.S.I, Medlab, Technicon, B.T. S; associate engineer, B.T.S; technical trainer, B.T.S; instructor, Radio Institute of Salt Lake, Salt Lake Community College; instructor, BYU; T&I; Radio Institute Certificate; A.A.S.

BARLAGE, Larry *Professor*, Automotive (1983) Mechanic, Benchley Brothers Buick, Roger Whitney Chevrolet, Florida and Bollingers Chrysler/Plymouth; B.S; M.S; ASE (certified auto mechanic).

BARNES, Carol *Professor*, Health Science (1973) Supervisor and staff nurse, Cottonwood Hospital, Salt Lake County Hospital, St. Elizabeth Hospital, Mercer Hospital, LDS Hospital, Holy Cross Hospital; R.N; B.S; M.S.N.

BARNETT, Gary *Instructor*, Accounting (1989) Senior staff auditor, Arthur Andersen & Co.; controller, Steve Gose & Assoc.; chief financial officer/controller, Nord Petroleum Corp.; accounting officer and controller, Drillers Inc.; independent financial consultant & CPA; B.B.A; C.P.A.

BARTHOLOMEW, Earl R. *Professor*, Office Information Systems (1961) supervisor, administration, SLCC; T&I; B.S.

BATTLES, Emma Jean *Assistant Professor*, Life Science (1989) B.A; M.S.

BEDDOES, Michael *Assistant Professor*, Computer Information Systems (1983) Owner/partner, Creative-Data Systems; private programmer and designer; programming manager, vice-president, MIS American Strevell; manager, Envirotech Information Systems; group leader, systems programmer, Sperry Univac; programmer, Holy Cross Hospital; B.S.

BEEBE, Kathryn C. *Professor*, Business Management (1967) Secretary, Ute Mountain Indian Tribe, Southern Ute Indian Tribe; legal secretary, McKelvey & McKelvey, City and County of Denver, Senior & Senior, Utah Supreme Court; administrative assistant, University of California; educational administration, SLCC; CPS; B.S; MIE; Ed.D.

BILLINGS, George *Assistant Professor*, Building Construction (1986). Owner construction company; general building contractor; high school teacher, Granite District; construction superintendent; carpenter.

BINGHAM, Keith E. *Professor*, Electronics, Skills Center (1974) Employed by: Com-Tel, Process Systems, Beehive Medical Electronics, Litton, Data Systems, Litton Guidance and Control Systems; self-employed, Auto-Electrical Service; A.A.S; B.S; M.Ed; T&I.

BIRCH, Grace *Instructor*, Barbering/Cosmetology (1985) Owner and operator, Fashion Manor; manager, La Petite Beauty Salon; instructor, Cameo College of Beauty, Bountiful College of Beauty, Continental College of Beauty, SLCC; Utah instructors' license, cosmetology license.

BLACK, Durant C. *Associate Professor*, Marketing & Management (1973) Manager, Covey's Little America and Ben Lomond Hotels; Food Service Director, University of Utah; sales and marketing; M.B.A.

BLAIN, Robert J. *Professor*, Developmental Studies (1987) Assistant Professor, BYU/Hawaii; mathematics teacher, Granite Schools; wire chief, Union Pacific Railroad; B.S; M.S; Ed.D.

BLOMQUIST, Berit E. *Professor*, Life Sciences (1974) Clerical work, LDS Church, Osterbottens, Kott, Vasa, Finland; comptometer operator; science teacher, Granite Distsrict; T&I; B.A; M.S.

BOLINDER, J. Robert *Instructor*, Refrigeration/Air Conditioning (1972) Repairman, General Electric, Tooele Army Depot, Castle Company; T&I.

BROWN, Bruce W. *Assistant Professor*, Computer Science (1988) Adjunct professor, Clemson University; instructor, Tri-County Technical College; B.S; M.S; Ph.D.

BURDETT, Don *Instructor*, Automotive (1981) 44 years with local dealerships; owner/operator Burdett Automotive, Inc; area service manager, Chevrolet Motor Division; instructor, G.M. Training Center, Sun Electric; graduate, G.M. School of Merchandising and Business Mgt; A.S.E. certified in 16 specialties; 106 G.M., Ford, Chrysler, and Champion industrial school certificates.

CANTONWINE, Robert *Instructor*, Barbering (1987) Owner, DesignMaster, LifeLine Hair, Scottsdale AZ.; member of research development division, Redken Laboratories, Inc.

CARROLL, Diana *Instructor*, Medical Assistant (1990) Certified medical assistant; A.A.S.

CHANDLER, Linda *Instructor*, Physical Sciences (1990) B.S; M.S.

CHILD, Ralph S. *Associate Professor*, Accounting (1965) Insurance underwriter, manager, Safeway Stores, Inc.; certificate; T&I; B.S.

CHRISTENSEN, Dallis J. *Professor*, Electronics Technology (1967) Warrant radio electrician, flight instructor, U.S. Navy; instructor, Weltech College; technical advisor, Philippine Department of Education; training at U.S. Navy Electronics, Nuclear Weapons, and CIC Schools; Eastman Kodak Chemical Milling; Humboldt State College (Lawrence Livermore micro processor course); Piedmont Technical College (robotics course); T&I; B.S; M.S.

CHRISTENSEN, Larry *Associate Professor*, Social Science (1970) Dean of students, admissions counselor, SLCC; probation supervisor, Second District Juvenile Court; B.S; M.Ed.

CHRISTOPULOS, Jeviene *Associate Professor* Information Systems (1970) Instructor, Granite Schools; administrative supervisor, U.of U; B.S.

COURT, Ray B. *Instructor*, Heavy Duty Mechanics (1979) 30 years as service representative, Century Equipment; shop foreman, Schockers Construction; factory representative, Jarvis Clark; shop manager, Servicar; private consultant.

COX, Robert J. *Professor*, Business Management (1975) Vice president's staff, Standard Oil of California; owner/manager of small business; employment manager, LDS Hospital; ACE representative Small Business Administration; T&I; B.S; M.B.A.

CRITTENDEN, Susan *Assistant Professor*, Office Information Systems.

CUMMINS, Chuck, *Assistant Professor*, Math and Computer Systems (1987) B.S; M.S; Ph.D.

CUNNINGHAM, Linda M. *Assistant Professor*, Related Studies (1987) Adjunct instructor, SLCC; English lab coordinator, SLCC; associate editor, *Dialogue*; free-lance editor; B.A; M.A.

CURTIS, Julie Ann *Associate Professor*, Office Information Systems (1975) Instructor, Emery County District; B.S.

DARNELL, Richard *Associate Professor*, Electronic Technology (1971) Electronics equipment specialist, Tooele Army Depot; electronics technician, Sperry Rand, HAFB.

DAVIES, Thomas H. *Associate Professor*, Pre-Engineering (1984) Instructor, pilot, USAF; mathematics instructor, Air Force Academy; professor of aerospace studies, U.of U; B.S; M.S.E.

DAVIS, Juanna M. *Instructor*, Developmental Studies (1975) Private secretary, tax examiner, I.R.S; teaching assistant; T&I.

DAVIS, R. Ben *Instructor*, Electricity (1976) Field service representative, REDGCO, M & T Chemical; instructor, UTC/Provo.

DAVIS, Sherwood L. *Professor*, Drafting and Design (1969) Designer, EDO Western, Sperry Utah; draftsman, Douglas Aircraft; A.A.S; B.S; M.S.

DAY, Rolayne *Assistant Professor,* Office Information Systems (1984) Teacher, Jordan and SLC Districts, U.S. Indian Police Academy; instructor, Utah State University; secretary, Utah State Senate, Thiokol, Utah State University; B.S; M.S.

DENNING, Roy *Instructor,* Computer Programming (1988) Owner/technical director, Consolidated Data Services; consultant, staff engineer, engineering manager, Sperry Univac; B.S.

DERRICK, Rodney V. *Instructor,* Cosmetology (1990) Utah Cosmetologist and Barber of the year; member, Utah Hair Fashion Committee; national guest artist; winner, 30 state and national styling contests; T&I.

DRECHSEL, Alan *Instructor,* Transportation, Skills Center (1980) Mechanic, Utah State Department of Transportation, I.M.L., Utah Truck Lease, Associated Foods.

EGELUND, Larry D. *Associate Professor,* Computer Information Systems (1989) Consultant; owner, Applied Software Marketing; director, officer, owner, J & K Computer Systems; data processing manager, Thatcher Chemical, Pole Line Electrical Supply; instructor, Pennsyylvania State University, Gettysburg College; B.S; M.A.

EDGMAND, Nina M. *Associate Professor,* Office Information Systems (1976) Instructor, Mountainwest Business College; legal secretary, Dahl & Sagers, Owen, Ward & Geldzahler, Jones Waldo, Prince Yeates; self-employed, Professional Secretarial Service; B.S., CPS.

ELBERT, Nancy Mottet *Professor,* Social Science (1981) Associate professor, American College of Switzerland; B.A; M.A; M.S.

ELLISON, Thomas R. *Associate Professor,* Drafting and Design (1965) Designer, Hercules Powder, Dallons Labs; AIDD; T&I; B.S.

EMETT, Ray C. *Associate Professor,* Developmental Studies (1981) Instructor, Granite District; painter, department coordinator, Community Schools; B.S.; M.S.

ERICKSON, Ree *Professor,* Finance & Credit (1972) Service instructor/representative, Ford Motor Company; service manager, Bennett Truckland, Cline Auto Sales; T&I; B.S; M.S.

FARMER, Nancy *Instructor,* Physical Education (1989) Director, Jackson City Community Center 1975-85, B.S.; M.S.

FEENY, Susan *Assistant Professor,* Health Science (1984) Head nurse, staff nurse for ICU, VA Hospital (SLC), Saint Marks Hospital; R.N; B.S.N; M.S.N.

FERNLEY, Allison *Instructor,* Humanities (1990) B.A; M.A.

FORD, Steve *Assistant Professor,* Welding (1986) certified welding inspector; level II NDT Technician; welder, Precision Tech, Nelson Brothers Construction, Dexon Inc.; electronic technician, Stockdale's, Litton Controls Systems; A.A.S. degrees in welding and electronics.

FOSTER, Robert L. *Instructor,* Transportation (1989) Corporate traffic manager, LDS Church; traffic manager, Eagle F&B Trucking Co.; pricing director, Uintah Freightways; representative/assistant traffic manager, Browing Freightlines; technical writer/editor, Morton Thiokol; B.A.

FRANGOS, William *Assistant Professor,* Automated Systems Technology (1985) district geophysicist, Kennecott Exploration; research geophysicist, Cities Service Minerals; head geophysicist, Geotronics, Inc.; president, Auriga, Inc.; vice president, Aquila Instruments; B.S; M.I.T.

FRISBEY, Gordon *Associate Professor,* Computer Information Systems (1979) Systems analyst, Weber State, Professional Information Associates; programmer/analyst, Sperry Univac, Kennecott Copper; operator, Commercial Security Bank; B.S.

FULMER, June M. *Associate Professor,* Developmental Studies (1978) Psychiatric aide, Utah State Mental Hospital; counselor, Odyssey House; B.A; M.A.

GAILLARD, Donald *Assistant Professor,* Basic Skills, Skills Center (1982) Speech therapist, Job Corps; instructor, VIP; assistant director, Salt Lake Skills Center; T&I A.S; B.S.

GILES, Gerald L. *Professor,* Developmental Studies (1972) Assistant manager, Bowman's Market; instructor, Granite District; T&I; B.A; M.A.

GLASCOE, Drusilla *Assistant Professor,* Social Science (1990) B.A; M.S.

GRAHAM, Richard *Instructor,* Graphic Design (1987) Freelance artist; supervisor, XAM Productions; animation layout, story board artist; court room artist, KTVX.

GREGG, Mary Ann *Associate Professor,* Related Instruction (1969) Instructor, SLC and Granite Districts; administrative coordinator, Granger Elementary Community School; secretary, chamber of commerce; receptionist; salesperson (varied); B.A; M.S.

GREN, Donald C. *Instructor,* Business Management (1988) Research associate, University of Utah; research and teaching assistant, Brigham Young University; business owner/manager; A.S.; B.S.; M.S.; M.B.A.

GROVER, Neal D. *Professor,* Automotive (1964) Owner-operator, Grover's Auto Body & Fender; certified instructor, Inter-Industry Conference on Auto Collision Repair; T&I; ASE; A.A.S; B.S; MIE.

HADLEY, Patricia *Assistant Professor,* English/Humanities (1984) teaching assistant, library assistant, U of U; free lance journalist, *Utah Holiday Magazine*; library assistant, Monterey Public Library, Salt Lake Public Library; B.A; M.A.

HAMPTON, James R. *Professor,* Life Science (1982) Assistant and associate professor, Oklahoma City University; vector control specialist, U.S. Public Health; inspector, SLC Mosquito Abatement District; B.S; M.S; Ph.D.

HANCOCK, Larry *Instructor,* Aviation Maintenance (1988) Commercial helicopter pilot; FAA airframe and powerplant license; air traffic controller; EPDS training officer;owner/operator, American Helicopters Inc.; instructor, Utah State University; and FAA Academy School, B.S.

HERRING, Charles J. *Professor,* Accounting (1981) Instructor, Campbell College, East Carolina University; sales manager, Star Warehouses; field auditor, Interstate Commerce Commission; report analyst, U.S. Dept. of HUD; supervisor, Accounting and Tax Services; C.P.A; C.F.E; B.S; M.A.

HIBBERT, Marilyn *Associate Professor,* Office Information Systems (1976) Instructor, Kearns High School; instructor, Skills Center; secretary, Zion's Bank and Granite District; B.S.

HILL, Joan *Instructor,* Skills Center (1990) Clerical Instructor, Skills Center; Title I Instructional Aide, Central Elementary; Counselor, Tooele Master Academy

HOLT, Rex B. *Professor,* Accounting (1969) Instructor, Granite Schools; corporate officer, office manager, self employed accountant; business administration certificate; B.S; M.S.

HOOK Jane H. *Instructor,* Drafting and Design (1989) Designer, Hercules, Diasonics, Leeds & Northrup; drafter, Evans & Sutherland; A.A.S. T&I.

HOWELL, Joseph R. Jr. *Assistant Professor,* Finance and Credit (1984) Teaching assistant, U of U; First Security Bank; Utah State Attorney General's Office; member, Utah State Bar Assn; B.S; M.B.A; J.D.

HUBER, Dean *Assistant Professor,* Developmental Studies (1990) Coordinator, English Language Program, University of Utah; instructor, Westminster College of Salt Lake City; B.A; M.A.

HULET, Grant M. *Professor,* Graphic Design (1968) Art director, Jarman & Skaggs Advertising, Ross Jurney & Associates; T&I; B.S; M.A.

ITALASANO, Joe *Instructor,* Barbering/Cosmetology (1974) Salt Lake Barber College certificate; Bob's Barber Shop; Joe's Barber Shop; SLCC certificate; Utah barber instructor license; T&I.

JACOBS, D. Duane *Professor,* Office Information Systems (1986) Career center director, cooperative education director, UTC/Provo; instructor, Pima College, Weber State, UTC/Provo; president, LanAir, Inc., and Jacobs Enterprises; sales consultant, Pioneer Industries; B.S; M.S; Ed. D.

JANSEN, Lawrence C. *Associate Professor,* Architectural Technology (1974) Chief draftsman, designer, various architectural firms; registered architect in private practice; A.I.A; B.A.

JENSEN, L. Carl *Professor,* Physical Science (1976) Building construction, M.A.C. Construction; owner, Temple Valley Construction; instructor, Dixie College; B.S; M.S.

JENSEN, Richard H. *Professor,* English/Humanities (1986) Instructor, Utah State University, College of Eastern Utah; B.S; M.A.

JOHNSON, Jerry *Instructor,* Automotive Mechanics (1987)

JORDAN, I. Douglas *Associate Professor,* Graphic Design (1971) Evans Advertising; free lance artist; art director and advertising art consultant; Art Center College of Design; T&I; B.A.

JORGENSEN, Dorene D. *Professor,* Office Information Systems (1972) Clerk, Tooele Army Depot; teletype operator, Mountain States Telephone; A.A; B.A; M.S.

JOSEFSON, Ann-Mari *Assistant Professor,* Physical Sciences (1988) M.S; Ph.D.

KIRK, Roselyn N. *Associate Professor,* Communications (1978) Reporter, Davis County newspapers; instructor, Granite District; B.S; M.Ed.

KOMATAR, Frank *Associate Professor,* Mathematics and Computing (1981) Computer worker, Aero-Graphics; instructor, Illinois, Iowa, and Wisconsin public school systems; B.A; M.S.

LAMBERT, Melodee *Assistant Professor,* Business English (1985) Instructor, Orem High School; administrative assistant, academic programs cardiology division at Stanford University; graduate, University of Utah; M.Ed.

LANGFORD, Robert R. *Associate Professor,* Welding (1982) Teacher, Jordan High School; welder, fabricator, Utah Fabrication, EIMCO, Eaton Metals; certificate of technology in metals; A.A.S; B.S.

LARSON, John A. *Professor,* Heavy Duty Mechanics (1969) Mechanic, Wheeler Machinery, Nevada Rock and Sand, Industrial Construction Company, and Cashman Equipment; T&I; MIE; B.S.

LAWRENCE, Stanley W. *Associate Professor,* Electronic Technology (1976) Technician, Bell Systems, IBM, Texas Instruments, Stabro Laboratories, SLCC; technician license FCC; T&I; A.A.S; B.S; BSEET.

LERDAHL, Paul *Instructor,* Electricity (1990) Licensed master electrician, certified industrial electrician; state certified teacher of vocational/ industrial electricity; foreman, Concrete Products Co; apprenticeship instructor, Safety Committee International Union (Operating Engineers); A.A.S; B.S.

LUKE, Shirlene *Associate Professor,* Office Information Systems (1974) Secretary, LDS Church; B.S.

LUNT, Judith Lee *Associate Professor,* English/ Humanities (1969) Instructor, Davis District, California public schools; secretary, Harrison and Johnson; A.S; B.S; M.S.

MACFARLANE, Karen Cox *Instructor,* Business English (1989) Placement director, LDS Business College; instructor, LDS Business College; co-owner-operator, lawn service company; B.A.; M.A.

MACDONALD JERI *Instructor,* Barbering & Cosmetology (1990) Manufacturer's representative; artist; barbering and cosmetology instructor's license; provisional T&I.

MAGNUSSON, Kjartan T. *Professor,* Finance & Credit (1972) T&I; B.A; M.Ed; Ed.D.

MARTIN, Gary *Instructor,* Transportation, Skills Center (1982) Transportation USMC, Greyhound Lines; owner-operator.

MARTIN, Terry *Instructor,* Graphic Design (1987) Freelance photography and computer graphics; consultant; audio-visual designer, Rosenberger Production, Photo-Graphics, Salt Lake Sting/Trappers, City of Red Lodge, Washington Park Zoo; A.A.S.

MASON, Donna *Instructor,* Nursing (1988) FNP, Indian Health Care Center; chairman, Nurses PAC; Sigma Theta Tau Nursing Honor Society; A.D.N; B.S; M.S.N.

MATTHEWS, Tommie G. *Professor,* Developmental Studies (1971) Instructor, Utah and Arizona public schools, Clearfield Job Corps Center, Church College of Western Samoa; T&I; B.S; M.Ed.

McBRIDE, Paula S. *Associate Professor,* Adult Basic Education (1982) Instructor, Proviso District and Granite District; B.S; M.S.

McCORMICK, John S. *Assistant Professor,* Social Science (1988) Historian, Utah State Historical Society; assistant professor, Texas Tech University; B.A., M.S., Ph.D.

McKENNA, Suzanne *Assistant Professor,* English/Humanites (1988) Teaching assistant, ENMU and University of Utah; adjunct faculty, U. of U. Theatre Dept.; artistic director, U.of U. Theatre School; artistic director and advisory board member, Junior Shakespeare Academy and Company; instructor, Secondary Schools in Hawaii, California, Utah; director, actress; A.S., B.S., M.A., Ph.D.

McKERTICH, Alma *Associate Professor,* English/Humanities (1984) Teaching fellow, research fellow, U.of U; creative writer; AAA poetry awards; B.A; M.A.

McPHIE, Verlaine S. *Associate Professor,* Mathematics and Computing (1969) Instructor, SLC and Murray Districts; T&I; B.S; M.Ed.

MENDAY, Jeffrey *Instructor,* Physical Education (1989) B.S; M.S.

MERRILL, Don L. *Associate Professor,* Mathematics (1978) B.S; M.S.C.E.

METOS, Linda *Professor,* Office Information Systems (1976) Instructor, SLC District; secretary, law firm, ZCMI; librarian certificate; co-op director, SLCC; B.S; M.I.E.

MILLER, James, *Instructor,* Carpentry (1987)

MILLS, Debbie *Assistant Professor,* Health Science (1984) Instructor, staff orienter, educator, Primary Childrens Hospital; pediatric instructor, Brigham Young University; pheresis nurse, American Red Cross; med/surg nurse, Cottonwood Hospital; pediatric nurse, Humana Hospital; A.D.N; B.S; M.S.N.

MIYATAKE, George *Instructor,* Automotive Technology (1971)

MOHLMAN, Jeanette, *Assistant Professor,* Early Childhood Development (1986) Instructor, Granite School District, Central Arizona College, Northern Nevada Community College; CDA Advisor, Arizona/Nevada HSST CDA; consultant, Northern Nevada District; education coordinator, Mountainland Headstart; B.S.

MOHSENIAN, Hassan, *Associate Professor,* Pre-Engineering (1986) M.S.E; Ph.D.

MONTAGUE, Elizabeth *Assistant Professor,* English/Humanities (1980) Freelance writer; instructor, English, reading and humanities; B.A.

MONTGOMERY, Clarence S. *Instructor,* Aviation Maintenance (1987) FAA mechanic (airframe/powerplant) with inspection authorization; commercial pilot (helicopter and airplane with instrument rating); US Army aviation ARNG; senior crew chief; aviation technical inspector; USFS, USDA maintenance inspector; pilot inspector; Allison Turbine Engine School; Bell Helicopter School; USAF Aircraft Mechanic School; US Army Aviation Helicopter Repair School, Aircraft Maintenance Supervision School; pilot, search and rescue deputy, S.L. County Sheriff's Office.

MORAWETZ, Gayle C. *Professor,* Office Information Systems (1972) Bookkeeper, Albertson's Inc.; secretary, Utah State University and various freight lines; instructor, Granite District; real estate license; T&I; B.S; M.S.

MORDAUNT, Klea, *Assistant Professor,* Nursing (1988) Staff nurse (operating room) L.D.S. Hospital, Veterans Adm. Medical Center, New York Hospital, Cornell Medical Center, Holy Cross, Jordan Valley Hospitals; staff nurse (obstetrical) Cottonwood Hospital; assistant professor, Weber State College; R.N., B.S.N., M.S.N.

MOSS, Mark D. *Assistant Professor,* Accounting (1977) Accountant, Arch Accounting Service; A.S; A.A.S.

MURPHY, Dennis W. *Assistant Professor,* Automated Systems Technology (1987) Consultant, Western Research Consulting; CAD/CAM, master tool and die maker; B.S.; T&I, M.S.

MURRAY, Darrell *Associate Professor,* Life Science (1988) Assistant Professor, departments of medicine and anatomy, University of Utah. B.A.; M.A.; Ph.D.

NELSON, Audrey *Instructor,* Printing (1989)

NELSON, Irina *Professor,* Physical Science (1990) B.S; M.S; Ph.D (2).

NICHOLSON, Laura *Assistant Professor,* Nursing (1990) B.S.N; M.S.N.

NIELSON, Donald H. *Assistant Professor,* Manufacturing Technology (1987) Engineer, Alcoa aluminum; research engineer, Autonetics Division of North American Aviation; product manager, Motorola, Inc.; technical specialist, Hercules, Inc.; president, Biomechanical Systems, Inc., Laser Graphics, Inc., Biomaterials Research Institute, Ramex Synfuels International; science advisor, Utah State; B.S; Met.E; M.B.A; Ph.D.

NINOW, Richard *Assistant Professor,* Architectural Technology (1966) Designer, draftsman, construction supervisor; head draftsman in architect's office; associate member A.I.A; Cape Technical College certificate; A.A.S; T&I.

NOBLE, Jeanne *Professor,* Office Information Systems (1975) Instructor, Stevens Henager College; administrative assistant, Utah Bio-Medical test lab; B.S; M.S.

NOBLE, Marian *Associate Professor,* Basic Skills, Skills Center (1975) Office manager, financial management company; teacher and counselor, Granite District; counselor, SLCC; certification in administration; B.S; M.S.

NOFFSINGER, Patricia *Associate Professor,* Developmental Studies (1979) Utah real estate license; NASD registered representative, Utah insurance license; business owner and manager; teacher, Farmington, New Mexico public schools and Granite Districts; Utah; B.S; M.Ed.

ONTIVEROS, Seth *Assistant Professor,* Welding, Skills Center (1985) 13 years in welding trade; certified welder, Eaton Metals, Eimco; T&I certificate.

PABST, Ruth, *Instructor,* Electronic Assembly, Skills Center (1976) Electronic assembler, Sperry Univac, Beehive Medical.

PARR, Reed *Professor,* Mathmatics (1967) B.S; M.I.E.

PAULSEN, Don Wayne *Professor,* Building Construction (1971) Carpenter, general contractor; cabinet and mill foreman, LDS Church, Bach Construction, Hammon Cabinet and Fixture; T&I; A.A.S; B.S.

PETERSON, Linda *Associate Professor,* English/Humanities (1985) Teaching fellow, University of Wisconsin, Madison, University of Utah; instructor, Park City Schools, Michigan; B.S; M.A.

POULSEN, Gary James *Associate Professor,* Drafting and Design (1982) Draftsman, U&I Incorporated, Fiber Science, IRECO Chemicals, Eaton-Kenway, Hercules; A.A.S.

PRAWL, Phyllis *Instructor,* English-as-a-Second-Language (1989) Commission, U.S. Navy; B.A; M.A.

REINHOLD, Allen K. *Professor,* Graphic Design (1969) Instructor, Granite and Emery County districts; artist, BYU Graphics Department & Utah Division of Social Services; illustrator, Bookcraft; freelance artist; member, Utah Water Color Society; exhibits nationally; T&I; B.A; M.A.

RICHARDS, Marlene K. *Assistant Professor,* Health Science (1968) Nurse, Salt Lake County Hospital; general duty nurse, Valley West Hospital; head nurse, Hercules; T&I; R.N.

RICHARDSON, Kim, *Assistant Profesor,* Management (1987)

ROBERTSON, Bonita *Professor,* Health Science (1978) Medical-surgical nursing; health coordinator for a community college; R.N; B.S ; M.S.

ROCK, Claudia *Instructor,* Nursing (1990) A.D.N; B.S.N.

ROWLEY, Dolores *Associate Professor,* Office Information Systems (1984) Instructor, SLCC Skills Center, Ed Crane Studio; secretary, Utah Board of Education; international entertainer; B.S.

RUFFUS, Stephen *Assistant Professor,* English/ Humanities (1990) B.A; M.A.

SADAT-HOSSIENY, Morteza *Instructor,* Manufacturing Technology (1990) Instructor, Iowa State University; assistant manager, Total Petroleum Company; B.S; M.S; Ph.D.

SAFAI, Nick *Assistant Professor,* Accounting (1990) B.S; M.S; M.S.E; Ph.D.

SAGER, Michael *Assistant Professor,* Machine Trades (1989) Journeyman toolmaker, General Motors, Henry Ford Community College; N.C. Machinist, Bob Hall, Inc.; CNC fixture designer/toolmaker, Rank, Inc.; R/D toolmaker, Acurex Corporation; electro-mechanical NC/CNC technician, Sperry-Univac; machine shop supervisor, U.S. Navy; journeyman engraver/owner, The Glass Canvas Gallery, Kearns, Utah.

SCHMITH, Ronald A. *Assistant Professor,* Electricity (1982) Engineer, American Solar Floors; electrician, WBPI; environmental control, Benton Corp.; ISA; certificate; A.A.S.

SELLERS, Cecil C. *Assistant Professor,* Small Equipment/Vechicle Technology (1984) Suzuki and Honda motorcycle training programs; service manager, John Deere Suzuki; owner/operator, Four Seasons Repair; consultant, SEE-US Sales & Service, Greenbelt Gardens.

SEVERSON, Ronald *Assistant Professor,* English/Humanities (1990) B.A; M.A.

SHEEHY, Jeri J. *Instructor,* Barbering/Cosmetology (1978) Operator, Auerbach's Salon; owner-operator, private salon; manager, SyniCut Salons; instructor, Continental College of Beauty; Krist-Leigh Salon; cosmetology license, cosmetology instructor license.

SHEPPARD, Helen D. *Associate Professor,* Health Science (1981) Supervisor, medical intensive care, VA Hospital; counselor, adolescent unit, New York State Department of Mental Hygiene; President's Council for Mental Health; B.S; B.S.N.

SIMPKIN, Robert *Instructor,* Continuing Education (1990)

SMART, Grant W. *Assistant Professor,* Social Science (1973) Instructor, administrator, SLC District; director, NAVPA; T&I; B.S.

SMITH, Dale *Associate Professor,* Early Childhood Development (1986) Director, SLCC Child Care Center; research and training; specialist, Institute for Child & Family Studies; assistant director, Child Development Center, Texas Tech. University; B.S; M.S.

SMITH, Don J. *Professor,* Finance & Credit (1972) Internal auditor, SL County; auditor, Peat Marwick (CPA), Ernst & Ernst (CPA); business manager; B.S.

SMITH, Hyrum *Instructor,* Heavy Duty Mechanics (1971) Mechanic, I.M.L., Cummins Diesel; mechanical consultant, Clark Tank Lines, Utah Diamond Lines, Smith Brothers Lines, Lindner & Wood, Barton Truck, Newman Construction, Zion Motors, Butterfield Trucking.

SMITH, Paul M. *Instructor,* Mathematics (1990) numerical analyst, software engineer, aerospace industry; M.S.

SNYDER, Lois Kyle *Professor,* Graphic Design (1977) Owner-operator, Quik Draw Art Studio; free lance artist; advertising art consultant; instructor, Montana Public Schools, SLC District, Clearfield Job Corps; elementary art specialist, San Francisco Unified School District, U.S. Forest Service; illustrator, Colorado University, Boulder; University of Montana, Missoula; University of Utah; Art Center College of Design at Los Angeles; B.A; M.A.

SOUTHWICK, Ray M. *Professor,* Automotive (1965) Mechanic, Fred A. Carlson, Bountiful Motors, Rick Warner Ford; General Motors Institute certificate; A.S.E. certified; T&I; B.S; MIE.

SPAINHOWER, Charles S. *Instructor,* Automotive (1973) Paint shop foreman, By's Body and Paint; auto body painter, Town and Country Rambler, Steve Evans, Les Jenson Collision Repair; owner, Chuck Spainhower Specialties; certified instructor, Inter-industry conference on Auto Collision Repair; ASE certificate; T&I.

STEPHENS, Lewis P. *Professor,* Marketing (1974) Retail store manager, national chain; teacher, counselor, placement director, Stevens Henager College; registered representative NASD; Utah insurance license; B.S; M.S.

STEVENS, DelMar W. *Associate Professor,* Building Construction (1971) Carpenter; general contractor license; T&I; A.A.S; B.S.

STORK, Graham, *Assistant Professor,* Computer Science (1987) B.A; M.A; M.S.

STROM, Elaine *Instructor,* Early Childhood Development (1990) ECD Lab instructor; national representative, CDA; teacher, pre-school through graduate levels; published author; B.S; M.E.P.D.

STOWERS, Jonathan *Instructor,* French, Spanish; (1988) B.A., B.F.A., M.A.

SUKSDORF, Lynn H. *Assistant Professor,* International Business, Marketing and Management (1986) Business manager, NPI; marketing and group sales director, Solitude Ski Resort; assistant manager, Inflight Services of Western Airlines; assistant director, Alaska Dept. of Environmental Conservation; marketing director, Mt. Hood Meadows; B.S.

TANNER, William R. *Assistant Professor,* Biology (1987) Research associate, Southern Illinois University; B.A.; M.A.; Ph.D.

THOMAS, Louise *Instructor,* Medical Assistant (1984) certified medical assistant, AMA/AAMA; certified emergency medical technician, State of Utah; president, Salt Lake Valley American Association of Medical Assistants.

THORPE, Allan *Instructor,* Electricity (1974) Licensed master electrician; manager, J.C. Plucknet Electrical Contractor; certified electrical inspector; member, Board of Directors, Intermountain Electrical Association; ICEF; ICBO.

TRIPLETT, John *Assistant Professor,* Electronics Technology (1984) Instructor, electrical engineer, project engineer, test engineer, pilot, U.S.A.F; deputy chief, aircraft engineering, chief, plant management engineering, Hill AFB; A.A.S; B.S.E.E; M.S.E.E.

TSIBRANSKA, Violetta *Professor,* Electronics (1988) Professor, University of Agostinho Neto (Angola), University of Radio-Electronics (USSR); quality control manager, Intransmash (Bulgaria); engineer, Aerospace Research Center (USSR); published author; linguist; B.S.E.C; M.S.E.E; Ph.D.

TUCKER, Jana *Instructor,* Medical Assistant (1990) Education chairperson, Salt Lake County AAMA; certified medical assistant.

VAN DYKE, Fred B. *Associate Professor,* Graphic Design (1978) Commercial artist, Bailey and Montague, Thiokol Chemical Sales, A.B. Dick; Los Angeles Art Center; B.F.A.

VAN MOORHEM, Julie *Associate Professor,* WICAT Coordinator, Adult Basic Education, Skills Center (1983) Reading instructor, reading specialist, communication specialist, Norfolk Public Schools; Old Dominion University; Administration/Supervision Certification; B.S; M.S.

VAN OS, Huibert *Assistant Professor,* Electricity (1965) Machinist, EIMCO; EIMCO corporation certificate; T&I; A.A.S.

WALKER, Loretta A. *Professor,* Communication (1974) Secretary, Knight Adjustment; recreation leader, SL County Recreation Department, SL Kiwanis-Felt Girls Club; teacher, SLC and Granite Districts; B.A; M.Ed.

WALKER, William *Associate Professor,* Electronics Technology (1984) Electronic technician, aircraft electronic maintenance technician, U.S. Navy; medical electronics engineer, LDS Hospital, U.of U. Hospital; president, Woodsman Stove Company; B.S.

WALTON, Kathy M. *Associate Professor,* Marketing and Management (1984) Sales associate, Popular Dry Goods; savings counselor, First Federal Lincoln; teaching and research assistant, University of Nebraska; assistant professor, Purdue University; assistant director, Retail Institute; B.S; M.S; Ph.D.

WARNOCK, Richard B. *Instructor,* Pre-Engineering (1988) Director, R&D Texscan MSI; director of engineering, Texscan MSI; engineering consultant; digital video design engineer and project manager, Bosch Fernseh (now BTS); digital audio design engineer, Soundstream; Computer Science Dept. University of Utah; B.S.E.E., M.S.C., M.B.A.

WATT, D. Cyril *Assistant Professor,* Mathematics and Computing (1978) Teacher, department chair, Jordan District; plant operator, Otto Buehner Company; supervisor, Dyna Flex Corporation; materials plant operator, Fogle Red-E-Mix; carpenter (concrete forms), ECO Development and Construction Company; B.F.A.

WEBB, David L. *Associate Professor,* Drafting and Design (1976) Drafter designer, McNally Mountain States Steel, Jelco Engineering, Tooele Army Depot, Willard C. Nelson Associates; T&I; A.A.S; B.S.

WELLS, Lorna K. S. *Associate Professor,* Office Information Systems (1982) Teaching assistant, Utah State University; assistant, USU Business Co-op Program; legal secretary; secretary, LDS Church, Eaton-Kenway; teaching certificate; A.A.S; B.S; M.S.

WESTLEY, David C. *Associate Professor,* Welding (1975) Welding fabricator, Chicago Bridge and Steel; welder, General Dynamics; boilermaker, Bechtel Inc.; T&I; A.A.S.

WIDDISON, Jean *Instructor,* Physical Education (1987) B.S; M.S.

WIESENBERG, Clifford *Instructor,* Aviation Maintenance Technology (1985) Aircraft and power plant licenses; private pilots license; USAF., ANG; crew chief, chief flight engineer, quality assurance supervisor, several aviation maintenance schools; flight engineer, aircraft technical schools.

WIGNALL, Candace *Instructor,* Developmental Studies (1989) B.A.

WILLIAMS, Sally *Associate Professor,* Office Information Systems (1975) Primary Childrens Hospital; Utah Retail Growers Association; B.S.

WILLIAMS, Sally *Associate Professor,* Business, Skills Center (1975) Primary Childrens Hospital; Utah Retail Growers Association; B.S.

WILSON, Dennis *Instructor,* Finance & Credit , Economics (1988) Branch manager/commercial lender, First Interstate Bank of Idaho, First Security Bank of Utah; Commercial Systems Division, Unisys, Inc; B.S; M.B.A.

WILLIAMSON, Brian *Assistant Professor,* Aviation Maintenance Technology (1986) A&P mechanic; FAA inspection authorization; FAA written text examiner; FAA designated mechanic examiner; FCC General Radio Telephone Operator License; A.A.S.

WITT, Joseph W. *Professor,* Mathematics and Computing (1971) Service supervisor, Freed Chrysler/Plymouth; instructor, Jordan & Hillcrest Human Resource Center; mechanic, Moulton Manufacturing; Witt Brothers Excavating; B.S; NIASE certificate.

WOOD, James *Associate Professor,* Mathematics and Computing (1972) Civil engineer, surveyor; job shop welder; British Technical Teacher certificate; B.S; M.Ed.

WOOLEY, Jeffrey R. *Instructor,* Aviation Maintenance Technology (1987) F.A.A. mechanic (airframe & powerplant); engine mechanic & flight crew E.C.M. operator, U.S.N. & U.S.N.R.; graduate, Colorado Aero Tech; aircraft mechanic, Western Airlines; aircraft mechanic & director of maintenance, various general aviation operations; air national guard technician; turbine engine technician; crew chief; environmental systems shop chief.

WORLEY, Loren *Instructor,* Electronics Technology (1984) Teacher, Missouri public schools; LCDR, master chief electronics technician, U.S. Navy; instructor, director, United Electronics Institute; B.S. in progress.

WRIGHT, Bill *Instructor,* Sciences (1990)

YERBURY, Lynnette Mayne *Assistant Professor,* Accounting (1987) Accountant, Radix Corporation; CPA, Hansen Barnett and Maxwell; Internal Auditor, Granite District; B.S; CPA; M.B.A.

YOUNGMAN, Curtis W. *Professor,* Marketing (1978) Instructor, Weber State College; management and sales, Smith's Management Corporation, Allied Foods, and Harmons; sales, Micro-Computer Systems; sales training, Intermark Financial Group; B.S; M.S.

ZEISLER, Ulrich E. *Professor,* Electronics Technology (1971) Instructor, Radio Institute, U.of U.; master control engineer, KALL Radio, Intermountain Network, American Broadcasting Company; FCC 1st class radio license with radar endorsement; electronics technician, Industrial Physics and Electronics; T&I; A.A.S; B.S; M.Ed.

PROFESSIONAL STAFF

ANJEWIERDEN, John *Division Chair,* Community Education (1971) M.S.

AOKI, Margaret Becker *Marketing/Public Communications Assistant,* Public Communications Office (1990) B.A; M.F.A.

BALLARD, Davis V. *Division Chair,* Sciences (1968) B.S; M.S.

BEEBE, Robert *Assistant to the Business Vice President* (1968) Ph.D.

BELNAP, Vola C. *Admissions Advisor,* Admissions Office (1969) M.Ed.

BESSER, Susan *Director of Student Support Services,* Skills Center Student Services (1978) B.S.

BOSWELL, Katherine *Assistant to the President,* President's Office (1989) B.A; M.I.A.

BRUGGER, Geoffrey R. *Dean,* School of Continuing and Community Education (1969) T&I, B.A; M.S; A.B.D.

CARNAHAN, Orville D. *President* (1981) B.S. Utah State University; M.Ed; Ed.D.

CARR, Norma *Athletic Director,* Athletics (1989) B.S; M.S.

COOK, Les P. *Admissions Advisor,* Admissions Office (1988) B.S; M.S.S.

CROSSEN, Wayne *Division Chair,* Technology (1970) B.S.E.E; M.S.I.E.

DAVIDSON, Sherrie *Career and Academic Advisor,* Student Services (1986) B.A; M.Ed.

DURAN, John *Dean,* School of Humanities and Sciences (1989) B.S; M.Ed; M.S; D.A.

ERICKSON, Ann *Vice President,* Academics (1968) Ed.D.

EVANS, Loren P. *Registrar* (1973) B.A.

FELKER, Janet J. *Director,* Student Administrative Services (1986) B.A; M.A.T.

FERRE, Steven A. *Director,* College Store (1970) Certificate and Diploma, National Association of College Stores; A.A.S.

FERREL, KENT B. *Business Manager/ Controller* (1971) M.Acct.

GARDNER, Bryan *Assistant Director,* College and Public Communications (1963) A.A.S.

GARDNER, Pamela *Division Chair,* Humanities (1978) B.A; M.Ed.

GODFREY, James T. *Director,* Cooperative Education and the Career Action Center, Center for Business and Economic Development (1982) B.S; M.A.

GOODFELLOW, Brent H. *Executive Assistant to the President* (1973) B.S; M.S.

GUNDERSEN, Paul R. *Director of Facilities* (1963) B.S; M.S.

HARRIS-BELNAP, Tracy *Career and Academic Advisor,* Student Services (1988) M.A.

HAMILTON, Mark N. *Director, Accounting Systems and Investments,* Accounting Systems (1977) A.A.S.; B.S.

HAWKINS, Marvin *Director,* Computing Services (1979) A.A.S.

HEIGERT, Keith H. *Director of Advising and Assessment,* Student Services (1984) B.S; M.Ed.

HESLEPH, Jackie R. *Coordinator of PWI Program,* Skills Center (1984) B.S.

HOMER, Michael M. *Dean,* School of Business and Technology (1972) B.S; M.B.A; Ed.D.

HUNDRUP, Maria K. *Director of Instructional Operations,* Vice President for Academics Office (1989) M.B.A; Ph.D.

HUNT, Heber T. *Business Vice President* (1987) B.S.

JOHNSON, Rand A. *Director,* Center for Business and Economic Development (1983) B.S; M.P.A.

KRISTIANSEN, Gary *Academic Advisor,* Student Services (1985) B.A; M.S.W.

LANDWARD, Larry *Director of Student Planning and Assessment,* Student Services (1977) B.A; M.S.

LATKIEWICZ, John *Title III Project Director* (1978) B.L.S; M.A; Ph.D.

LUNDBERG, Karen M. *Division Chair,* Health and Human Services (1989) A.A; B.A; M.A; Ph.D

MAUGHAN, Peter *Director of Development* (1984) B.S.

MULHAUSEN-McINTYRE, *Director of Instructional Staff and Faculty Development,* Academic Vice President's Office (1982) M.A.

MENDOZA, Benjamin J. *Director of Custom Training,* Center for Business and Economic Development (1978) B.S; M.S.

MERRILL, Don L. *Division Chair,* Construction and Service Industries (1978) B.S.; M.S.C.E.

MITKO, Edith *Director,* Program Innovation (1977) B.S.

MORGAN, Judd D. *Student Services Vice President*1976) B.A; M.Ed.

NORMAN, Gayle *Director of Financial Aid,* Student Services (1985) B.A; M.S.

NOYCE, Beth *Nursing Admissions Coordinator & Nursing Advisor,* Student Services and Nursing Department (1989) B.S; L.P.N.

POULSEN, GARY J. *Director of the Training Center for CAD Systems,* Center for Business and Economic Development (1982) A.A.S.

PRICE, Robert L. *Director of Food Service,* College Center (1990)

RIDDLE, Ronald D. *Revenue manager,* Cashiering/Business Office (1988) B.S.

RIEBER, Jo *Director of Workshops, Seminars, and Conferences,* Center for Business and Economic Development (1987) B.A; M.A.

RONNFELDT, Loraine R. *Academic Advisor,* School of Humanities and Sciences *(1989)* B.S; M.Ed.

ROSS, Jeff *Director of Alcohol and Drug Education,* Student Services (1987) C.A.C; B.S; M.S.

SALAZAR, F. Paco *Director of the Skills Center,* School of Occupational Education (1978) M.S; M.S.W.

SANCHEZ, Nancy M. *Director of Administrative Services,* Administrative Services (1979) B.S; M.B.A.

SMITH, Sarah *Academic Advisor,* Student Services (1989) M.A.

SMOUT, Curtis E. *Director of College Center and Auxiliary Services,* ColeCollegeter/Student Services (1973) B.S.

SOMSEN, Marcia D. *Director,* Instructional Computing (1979) T&I; A.A.S.

STECKER, Alexander *Director of Libraries,* Support Services *(1981)* B.A; M.A; M.H.L; M.L.S; Ph.D; D.H.L; D.D.L.

TOWNSEND, Jane Ellen *Director of Admissions* Student Services (1986) B.A; M.B.A.

UDY, John A. *Division Chair,* Mechanics (1968) C.W.I; B.S., M.I.E.

VANDEWATER, George *Director of Continuing Education,* School of Continuing and Community Education (1983) B.S.

WADE, Richard E. *Advisor for Business and Technology,* Student Services (1981) B.S; M.Ed.

WARNICK, BOYD L. *Division Chair,* Business Systems (1977) M.S.

WHITEHEAD, J. Clark *Director of Personnel Services/Equal Opportunity,* Personnel Services (1982) C.P.H.R; B.A; M.A; Ph.D.

WEIMER, John *Director of Academic Standards,* Student Services (1976) B.A.

WILLIAMS, L. Jay *Director of College and Public Communications* (1982) B.A; M.A.

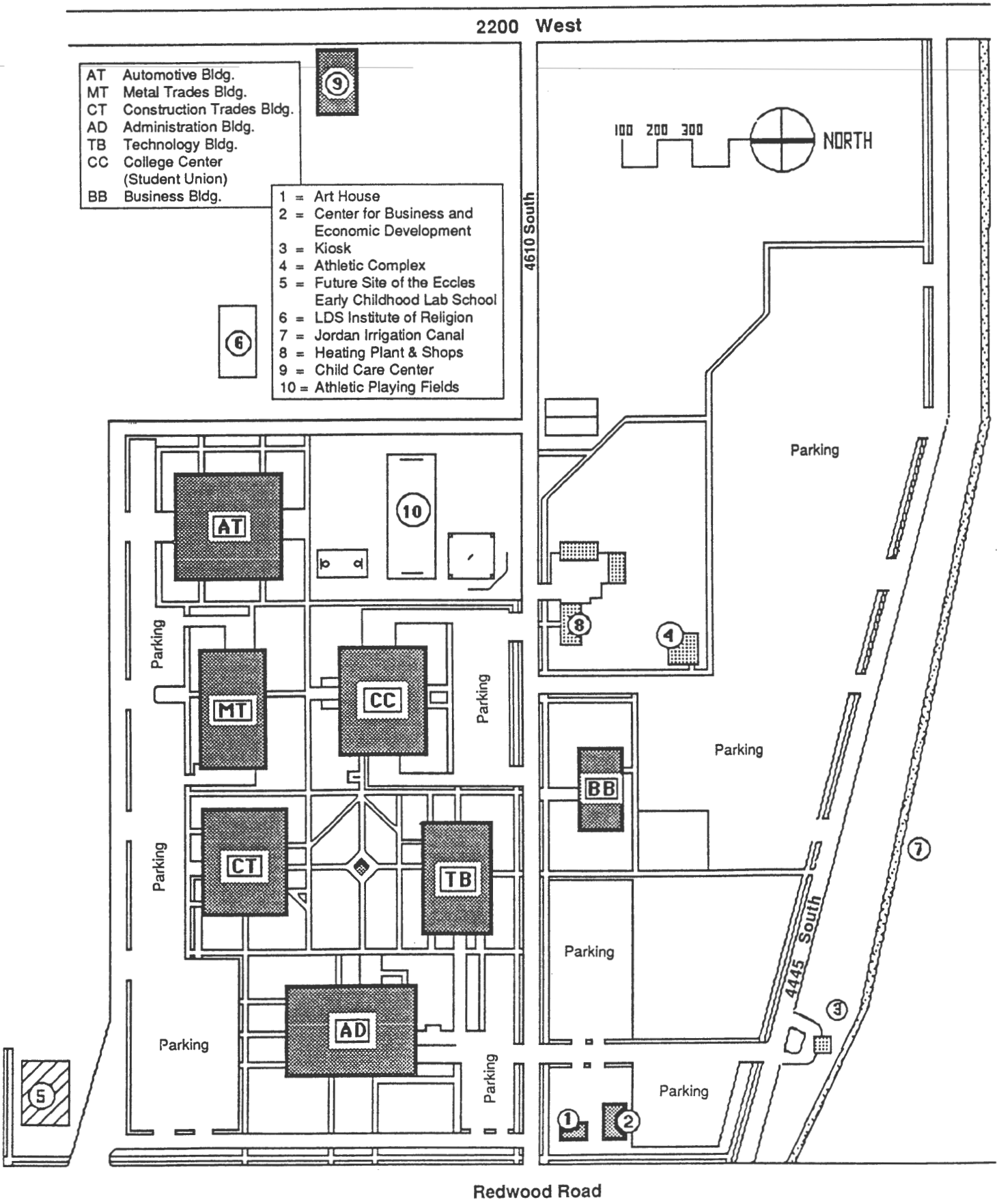
WILSON, Gordon Ned *Director of Student Activities,* Student Services (1989) B.S.

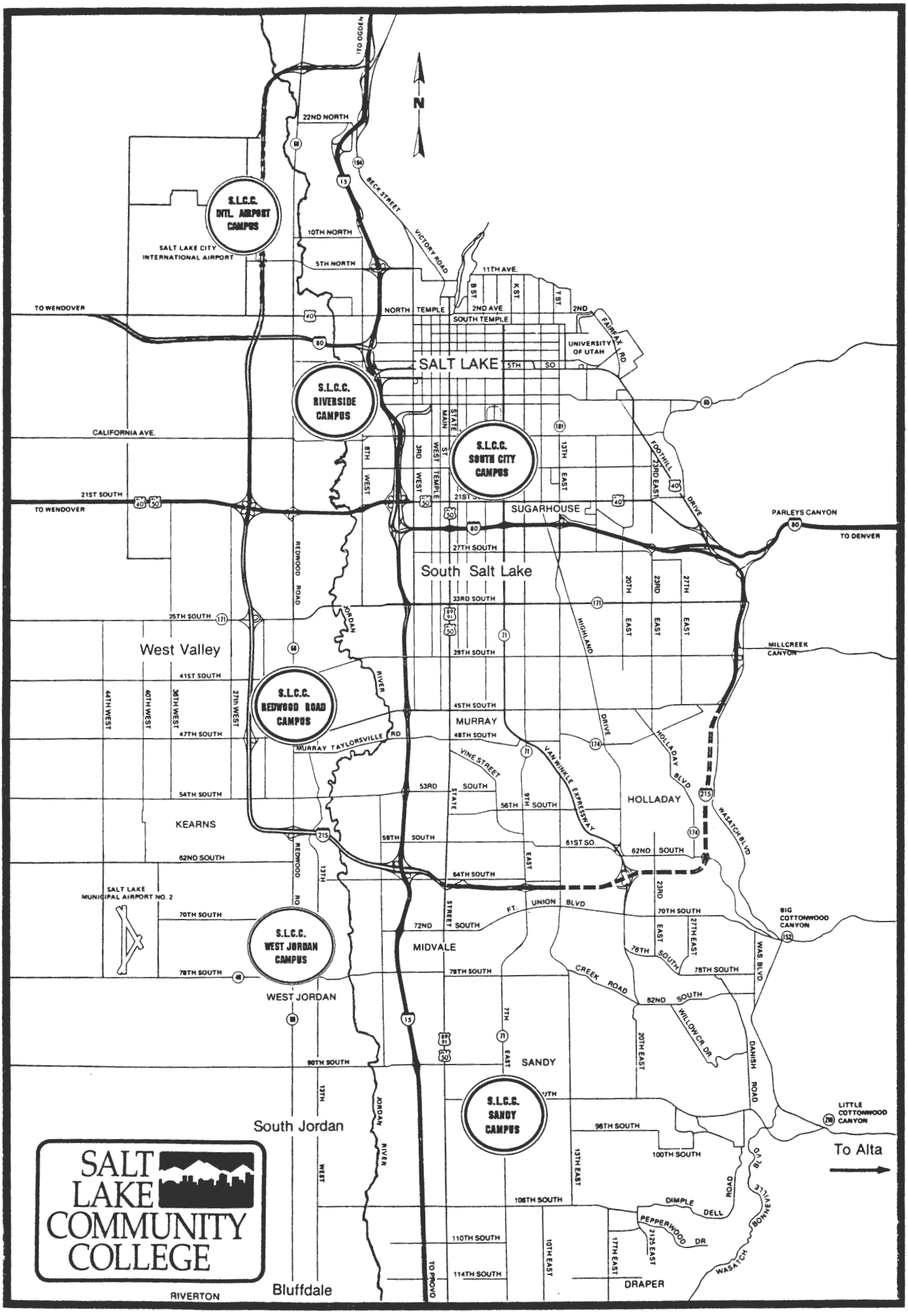
WOODS, Marsha *Assistant Director of Development,* Development Office (1988) B.A.

ZAUGG, Elwood C. *Dean,* School of Occupational Education (1976) A.S; B.S; M.S.

INDEX

Salt Lake Community College - Redwood Road Campus




S.L.C.C. INTL. AIRPORT CAMPUS
SALT LAKE CITY INTERNATIONAL AIRPORT
S.L.C.C. RIVERSIDE CAMPUS
S.L.C.C. SOUTH CITY CAMPUS
S.L.C.C. REDWOOD ROAD CAMPUS
S.L.C.C. WEST JORDAN CAMPUS
S.L.C.C. SANDY CAMPUS
SALT LAKE COMMUNITY COLLEGE
SALT LAKE
South Salt Lake
West Valley
SUGARHOUSE
MURRAY
HOLLADAY
KEARNS
MIDVALE
WEST JORDAN
SANDY
South Jordan
Bluffdale
RIVERTON
DRAPER
TO WENDOVER
TO DENVER
PARLEYS CANYON
MILLCREEK CANYON
BIG COTTONWOOD CANYON
LITTLE COTTONWOOD CANYON
To Alta
TO OGDEN
22ND NORTH
10TH NORTH
5TH NORTH
NORTH TEMPLE
SOUTH TEMPLE
11TH AVE.
2ND AVE.
CALIFORNIA AVE.
21ST SOUTH
27TH SOUTH
33RD SOUTH
35TH SOUTH
39TH SOUTH
41ST SOUTH
45TH SOUTH
47TH SOUTH
48TH SOUTH
53RD SOUTH
54TH SOUTH
56TH SOUTH
59TH SOUTH
61ST SO.
62ND SOUTH
64TH SOUTH
70TH SOUTH
72ND SOUTH
76TH SOUTH
78TH SOUTH
82ND SOUTH
90TH SOUTH
96TH SOUTH
100TH SOUTH
106TH SOUTH
110TH SOUTH
114TH SOUTH
BECK STREET
VICTORY ROAD
FAIRFAX RD
UNIVERSITY OF UTAH
FOOTHILL DRIVE
23RD EAST
REDWOOD ROAD
JORDAN RIVER
HIGHLAND DRIVE
VAN WINKLE EXPRESSWAY
HOLLADAY BLVD
WASATCH BLVD
VINE STREET
MURRAY TAYLORSVILLE RD
SALT LAKE MUNICIPAL AIRPORT NO. 2
FT. UNION BLVD
CREEK ROAD
WILLOW CR. DR.
DANISH ROAD
DIMPLE DELL ROAD
PEPPERWOOD DR.
WASATCH BLVD
TO PROVO
STATE STREET
MAIN ST.
WEST TEMPLE
EAST
WEST

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SALT LAKE COMMUNITY COLLEGE

International Airport Campus
551 North Sperry Way
Salt Lake City, Utah 84116
(801) 355-2427

Redwood Road Campus
4600 South Redwood Road
P.O. Box 30808
Salt Lake City, Utah 84130-0808
(801) 967-4111

Riverside Campus (Skills Center)
1040 West 700 South
Salt Lake City, Utah 84104
(801) 328-5500

Sandy Campus (Sandy Mall)
830 East 9400 South
Sandy, Utah 84094
(801) 571-3717

South City Campus
1575 South State Street
Salt Lake City, Utah 84115
Projected completion date: 1991

West Jordan Center
9221 South Redwood Road
West Jordan, Utah 84088
(801) 566-4105