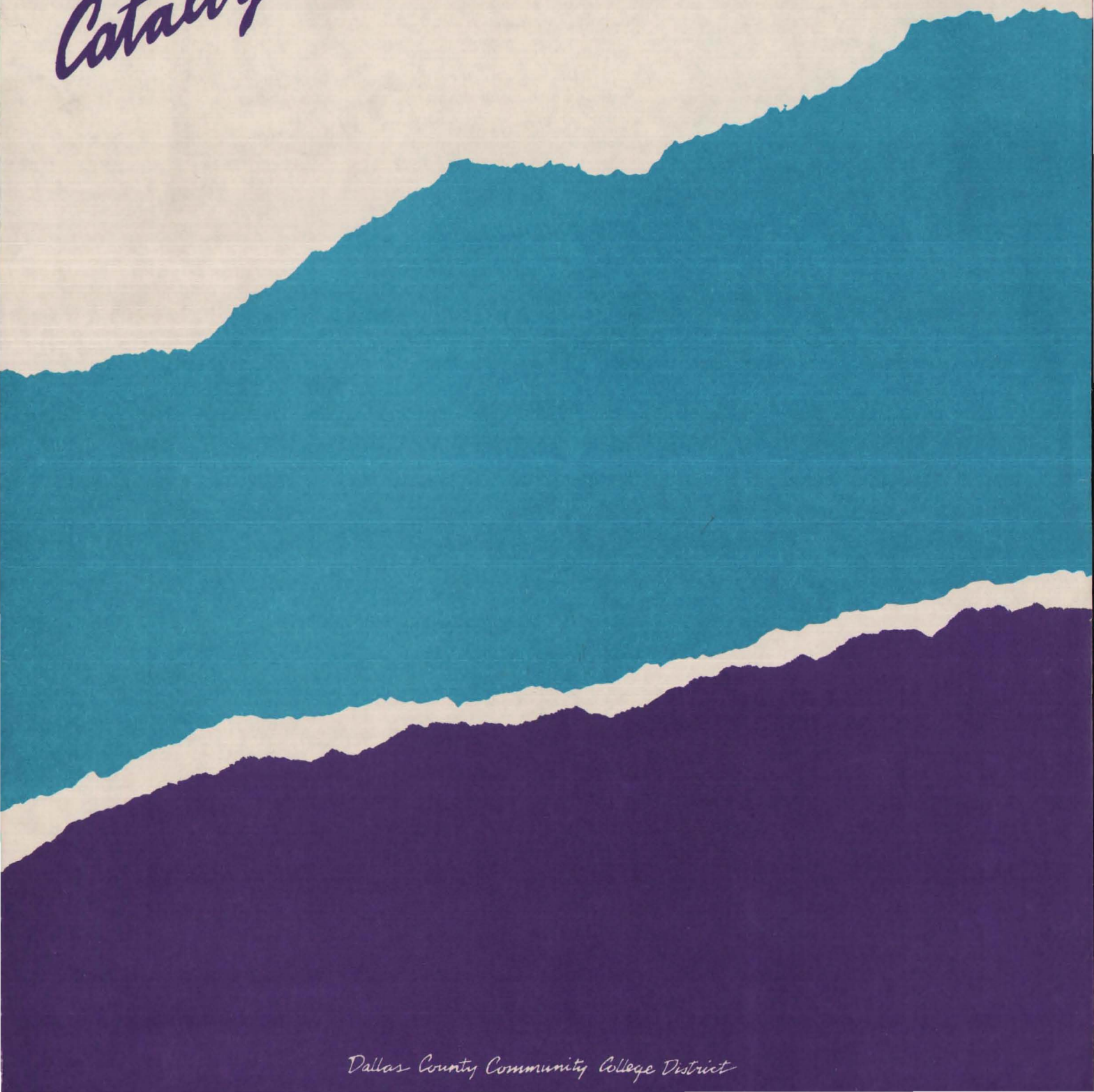


# Mountain View College Catalog 1983-84



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# Mountain View College



This catalog contains policies, regulations, and procedures in existence at the time this publication went to press. The College reserves the right to make changes at any time to reflect current Board policies, administrative regulations and procedures, and applicable state and federal laws and regulations. This catalog is for informational purposes and does not constitute a contract.

# ACADEMIC CALENDAR

## SUMMER SESSIONS, 1983

### First Sessions

May 27 (F)	Registration
May 30 (M)	Memorial day holiday
May 31 (T)	Classes begin
June 1 (W)	Last day for tuition refund
June 3 (F)	4th class day
June 24 (F)	Last day to withdraw "W"
June 30 (R)	Final examinations
June 30 (R)	Semester closes

### Second Session

July 5 (T)	Registration
July 7 (R)	Classes begin
July 11 (M)	Last day for tuition refund
July 12 (T)	4th class day
Aug. 4 (R)	Last day to withdraw "W"
Aug. 10 (W)	Final examinations
Aug. 10 (W)	Semester closes

## FALL SEMESTER, 1983

Aug. 17 (W)	Faculty reports
Aug. 18, 19, 22 (RFM)	Registration
Aug. 23 (T)	Faculty development
Aug. 24 (W)	Classes begin
Aug. 27 (S)	Saturday classes begin
Aug. 31 (W)	Last day for tuition refund
Sept. 5 (M)	Labor Day holiday
Sept. 7 (W)	12th class day
Nov. 24 (R)	Thanksgiving holidays begin
Nov. 28 (M)	Classes resume
Dec. 2 (F)	Last day to withdraw "W"
Dec. 13 (T)	Last day of classes
Dec. 14-16, 19 (WRFM)	Final examinations
Dec. 17 (S)	Final exams, Sat. classes
Dec. 19 (M)	Semester closes

## SPRING SEMESTER, 1984

Jan. 9 (M)	Faculty reports
Jan. 10-12 (TWR)	Registration
Jan. 13 (F)	Faculty development
Jan. 14 (S)	Saturday classes begin
Jan. 16 (M)	Classes begin
Jan. 23 (M)	Last day for tuition refund
Jan. 27 (F)	12th class day
Feb. 16 (R)	District Conference Day
Feb. 17 (F)	Faculty development
Mar. 19 (M)	Spring break begins
Mar. 23 (F)	Spring holiday for all employees
Mar. 26 (M)	Classes resume
Apr. 20 (F)	Easter holidays begin
Apr. 23 (M)	Classes resume
Apr. 27 (F)	Last day to withdraw "W"
May 9 (W)	Last day of classes
May 10-11, 14-15 (RFMT)	Final examinations
May 12 (S)	Final exams, Sat. classes
May 15 (T)	Graduation
May 15 (T)	Semester closes

## SUMMER SESSIONS, 1984

### First Session

May 25 (F)	Registration
May 28 (M)	Memorial Day holiday
May 29 (T)	Classes begin
May 30 (W)	Last day for tuition refund
June 1 (F)	4th class day
June 25 (M)	Last day to withdraw "W"
July 2 (M)	Final examinations
July 2 (M)	Semester closes

### Second Session

July 5 (R)	Registration
July 9 (M)	Classes begin
July 10 (T)	Last day for tuition refund
July 12 (R)	4th class day
Aug. 3 (F)	Last day to withdraw "W"
Aug. 10 (F)	Final examinations
Aug. 10 (F)	Semester closes

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# MOUNTAIN VIEW COLLEGE



In southwest Dallas County, Mountain View College is the community learning center for thousands of people. The second of seven colleges in the Dallas County Community College District, Mountain View opened in the fall of 1970. It is located at 4849 West Illinois Avenue in the southwest Oak Cliff section of Dallas and serves residents of South Dallas, Oak Cliff, Duncanville, Cedar Hill, and parts of Grand Prairie.

The various programs at Mountain View are designed to meet a broad range of educational needs. Students may elect to complete their first two years of study leading toward a bachelor's degree, or they may prepare for a career in an occupational or technical area. Many students attend Mountain View to train for advancement in their present employment or to train for an entirely new career opportunity. Non-credit courses also are available for people of all ages to gain personal enrichment, cultural awareness, or to participate in productive leisure time activities.

The Mountain View student body is composed of people of all ages and all backgrounds. The college represents a cross section of the community which it serves. This rich opportunity to interact with many varied people is an important part of the educational process and is well established in the Mountain View tradition.

## **The Campus**

The campus sits on the crest of a ridge that gives students an outstanding view of the downtown Dallas skyline to the north. Care has been taken to preserve the natural beauty of the 200 acre site. The long, flat roofed buildings stretch out gracefully along both sides of a rocky ravine and natural creek which has been landscaped into a very pleasant interior courtyard and garden.

Footpaths and stone terraces provide a beautiful area to walk, study, or relax. An enclosed pedestrian bridge spans the ravine, giving easy access to all parts of the campus and providing a

beautiful architectural focal point to the college.

## **Accreditation**

Mountain View College is a member of

- The Southern Association of Colleges and Schools
- The American Association of Community and Junior Colleges
- The League for Innovation in the Community College.

Mountain View College is recognized and sanctioned by the Coordinating Board of the Texas College and University System and the Texas Education Agency and is an Affirmative Action Equal Opportunity Institution.



#### DALLAS COUNTY COMMUNITY COLLEGE DISTRICT BOARD OF TRUSTEES

Top from left: Don Buchholz, Chairman; Bob Beard, Vice Chairman; Jerry Gilmore; Pattie T. Powell. Bottom from left: Trammell Crow; J.D. Hall; Bob Bettis; R. Jan LeCroy, Chancellor.

#### DALLAS COUNTY COMMUNITY COLLEGE DISTRICT ADMINISTRATORS

Chancellor .....	R. Jan LeCroy
Vice Chancellor of Business Affairs .....	Ted B. Hughes
Vice Chancellor of Educational Affairs .....	Terry O'Banion
Assistant Chancellor of Planning and Development Affairs .....	Bill Tucker
Associate Vice Chancellor of Educational Affairs .....	Ruth Shaw
Assistant to the Chancellor .....	Jackie Caswell
Director of Development .....	Carole Shipak
Legal Counsel .....	Robert Young
Special Assistant to the Chancellor .....	Lehman Marks
Director of Business Services .....	Robb Dean
Director of Educational Resources .....	Rodger Pool
Director of Computer Services .....	Jim Hill
Director of Community & Student Programs .....	Richard McCrary
Director of Facilities Management .....	Edward Bogard
Director of Personnel Services and Development .....	Barbara K. Barnes
Director of Planning, Research and Evaluation .....	Colin Shaw
Director of Public Information .....	Claudia Robinson
Director of Purchasing .....	Mavis Williams
Director of Resource Development .....	Bonny Franke
Director of Technical Services .....	Paul Dumont

#### MOUNTAIN VIEW ADMINISTRATION STAFF

President .....	W. H. Jordan	333-8700
Vice President of Business Services .....	Ralph G. Hall	333-8705
Vice President of Instruction .....	Linda Stegall	333-8710
Vice President of Student Services .....	Corinthian Fields	333-8696
Associate Dean, Extended Day Programs .....	Richard E. Smith	333-8610
Associate Dean, Learning Resources .....	Jim Corvey	333-8664
Associate Dean, Technical/Occupational Programs .....	John Nelson	333-8755
Assistant Dean, Community Service .....	Don Perry	333-8612
Administrative Assistant to President .....	Sharron Colburn	333-8678
Director of Admissions/Registrar .....	Don Gentsch	333-8600
Director of Co-operative Education .....	Jim Kavalier	333-8756
Director of Counseling Services .....	William A. Wilson	333-8606
Director of Financial Aid .....	Wilma Robinson	333-8688
Director of Health/Handicapped Services .....	Donna Richards	333-8699
Director of Public Information .....	Kathleen Cook	333-8680
Director, Student Development and Programs .....	Guy Gooding	333-8685

#### DIVISION CHAIRPERSONS

Business .....	Tom Goza	333-8616
Communications and Technology .....	Ron Hert	333-8624
Aviation/Fine Arts/Physical Education .....	Ann Cunningham	333-8632
Science and Mathematics Technology .....	Clifford Miller	333-8649
Social Science and Technology .....	William F. Mugleston	333-8656

#### MOUNTAIN VIEW FACULTY AND STAFF

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Craighton Univ., B.A., M.A.; George Washington Univ., M.Ph., Ph.D.	
Allen, Gemmy .....	Mid-Management
University of Texas, Arlington, B.B.A.; North Texas State Univ., M.B.A.	
Armand, Pilar .....	Spanish
Univ. of Havana, Cuba, B.A.; Texas Woman's Univ., M.A.	
Battles, Fred .....	Physical Education
Kigore Jr. College, A.A.; Baylor Univ., B.S., M.S.; North Texas State Univ., Ed.D.	
Bean, Al .....	Government/Psychology
Baylor Univ., B.A.; Southern Methodist Univ., M.Ed.; North Texas State Univ., Ed.D.	
Benson, Paul F. ....	English
Pacific Lutheran Univ., B.A.; Colorado State Univ., M.A.; North Texas State Univ., Ph.D.	
Brown, David L. ....	Drafting
East Texas State Univ., B.S., M.Ed.	
Brown, Jean W. ....	Music
Texas Woman's Univ., B.S., M.A.	
Caldwell, Leleonia E. ....	Reading
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Coed, Bruce .....	English
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Cook, E. Wayne .....	English
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Cortez, Lionel M., Jr. ....	Counselor
Univ. of Texas, Austin, B.A.; Our Lady of the Lake College, M.Ed.; Nova Univ., Ed.D.	

Convey, Sanford James	Assoc. Dean, Learning Resources	Machine Shop
Florida Atlantic Univ., B.A., M.Ed.; State Univ. of New York, Geneseo, M.L.S.		
Cowan, John Arthur	Art	
Kansas State Univ., B.S., M.A.		
Criswell, Atlanta	Speech	
North Texas State Univ., B.A., M.A.		
Cunningham, Ann R.	Chairperson, Aviation/Fine Arts/Physical Education	
Baylor Univ., B.S., M.S.		
DeLong, J. Richard	Mathematics	
Southern Methodist Univ., B.A.; North Texas State Univ., M.Ed.		
Dershem, Don	Data Processing	
Colorado State Univ., B.S.M.E.		
Dexter, Rawlings P.	English	
Colorado State Univ., B.A., M.A.		
Dodge, Tom	English	
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Duvall, Johnny W.	Mathematics	
East Texas State Univ., B.S.; Univ. of Illinois, M.A.		
Ehhardt, Harretyte B.	Resource Consultant	
Southern Methodist Univ., B.S., M.A.; Univ. of Houston, D.Ed.		
England, Daniel B.	Drafting	
Univ. of Oregon, B.S.; Dallas Seminary, Th.M.; North Texas State Univ., M.F.A.		
Faulkner, Ann	Learning Skills	
Univ. of Texas, Austin, B.A., M.A.		
Fetty, Larry	Art	
East Texas State Univ., B.S., M.S.		
Ferguson, Susan French	English	
Univ. of Dallas, B.S.; North Texas State Univ., M.A., Ph.D.		
Fields, Corinthian	Vice President of Student Services	
Univ. of Massachusetts, B.S., Ph.D.; Western New England College, M.B.A.		
Fletcher, Ann	Educational Paraprofessional	
DePauw Univ., B.A.; Univ. of Houston, M.Ed.		
Fulton, Stan	Electronics	
Univ. of Arkansas, B.S.E., M.Ed.; East Texas State Univ., Ed.D.		
Gentsch, Don	Registrar and Director of Admissions	
East Texas State Univ., B.S., M.S.; Nova Univ., Ed.D.		
Gooding, Guy	Director, Student Development and Programs	
Texas Tech Univ., B.A.; North Texas State Univ., M.Ed.		
Goss, Raye	Counselor	
Prairie View A&M College, B.S.; East Texas State Univ., M.S.		
Goza, Tom	Chairperson, Business Division	
Austin College, A.B.; East Texas State Univ., M.S., Ph.D.		
Gregory, David A.	Physical Education	
Temple Junior College, A.A.; Southwest Texas State Univ., B.S.; North Texas State Univ., M.Ed.		
Grimes, Geoffrey Allan	English	
Austin College, B.A.; Texas Tech Univ., M.A., Ph.D.		
Grissom, Anne	Speech	
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Haepf, John C., Jr.	Machine Shop	
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Hall, J.	Dance	
Studies: Mountain View College; American Univ.; Univ. of Texas, Dallas		
Hall, Ralph G.	Vice President of Business Services	
Southeastern State Univ., B.S.		
Hamilton, Ramona	Office Careers	
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Hegar, Kathryn W.	Business	
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Hert, Ron	Chairperson, Communications	
Univ. of Nebraska, B.A.; Illinois State Univ., M.A.		
Hettie, Mark	Music	
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Holland, Ronald C.	Physical Education	
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KavaBer, Jim	Director, Cooperative Work Experience	
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Korman, Frank	Accounting	
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McCain, Charles	Resource Consultant	
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McLoda, William S.	Geology/Geography	
Ohio State Univ., B.S.; Indiana Univ., M.A.T.		
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Henderson State Teachers College, B.A.; Univ. of Arkansas, M.A.		
Melkus, Roger A.	Counselor	
St. Thomas Seminary College, B.A.; Creighton Univ., M.S.; North Texas State Univ., Ph.D.		
Miller, Clifford D.	Chairperson, Science/Math Technology	
Wayne State Univ., B.S.; Washington Univ., M.A.; Univ. of Kentucky, Ph.D.; Studies: Max Planck Institut		
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Huston-Tillotson College, B.A.; Univ. of Denver, M.A.		
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Ablene Christian Univ., B.A., M.A.		
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Univ. of Texas, Arlington, B.B.A.; East Texas State Univ., M.B.A.; F.A.A. Airline Transport Pilot; Single and Multi-Engine, Basic, Advanced and Instrument Ground Instructor

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Pool, Larry . . . . . History/Government  
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Salter, Daniel M. . . . . Pilot Technology  
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Dartmouth College, B.A.; Reed College, M.A.T.  
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# General Information

For the Seven  
Member Colleges  
of the Dallas County  
Community College District



# I. GENERAL INFORMATION

## HISTORY OF THE DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

The Dallas County Community College District is comprised of seven colleges located strategically throughout Dallas County. Together the colleges enroll approximately 75,000 students and employ over 1,900 full-time faculty and staff members.

The growth of the District into an educational system with such impact was not by chance. In May, 1965, voters created the Dallas County Junior College District and approved a \$41.5 million bond issue to finance it. The next year the District's first college, El Centro, began operation in downtown Dallas. Eastfield College and Mountain View College enrolled their first students in 1970, and the plans for a multi-campus district became a reality. Richland College became the District's fourth college in 1972.

The voters of Dallas County approved the sale of an additional \$85 million in bonds in September, 1972. This step provided for expansion of the four existing colleges and the construction of three more colleges. A key part of the expansion program was the remodeling and enlarging of El Centro College, a project completed in 1979. Construction of new facilities resulted in the opening of Cedar Valley College and North Lake College in 1977. Brookhaven College, the final campus in the seven-college master plan, opened in 1978.

## DISTRICT PHILOSOPHY AND GOALS

Since 1972, the District has been known as the Dallas County Community College District. The name shows that the District has outgrown the term "junior college." The name also reflects the District's philosophy. The colleges truly are community institutions, meeting the varied educational needs of the growing Dallas County region. The primary goal of the District and its colleges is to help students of all ages achieve effective living and responsible citizenship in a fast-changing region, state, nation, and world. Each college is therefore committed to providing a broad range of educational programs for the people it serves.

The needs, abilities, and goals of each student are considered important. The focus is on creating an educational program for the

individual rather than squeezing or stretching the individual to fit an "educational mold."

The District therefore has a place for different kinds of students. There is a place for the young person setting forth toward a degree in medicine, and a place for the adult delving into an interesting hobby to enrich leisure hours. There is a place for the person preparing to enter a trade or technical field with a year or two of studies, and a place for the employed individual wanting to improve occupational skills. There is a place for the very bright high school student ready to begin college work in advance of high school graduation, and a place for the high school dropout who now sees the need for education in today's complex society. In short, there is a place for everyone.

How do the colleges meet the educational needs of such a varied family? The answer is found in four categories of programs:

1. For the student working toward a bachelor's or higher degree, the colleges offer a wide range of first-year and second-year courses which transfer to senior colleges and universities.
2. For the student seeking a meaningful job, the colleges offer one-year and two-year programs in technical and occupational fields.
3. For the employed person wishing to improve job skills or to move into a new job, the colleges offer credit and non-credit adult educational courses.
4. For the person who simply wants to make life a little more interesting, the colleges offer community service programs on cultural, civic and other topics.

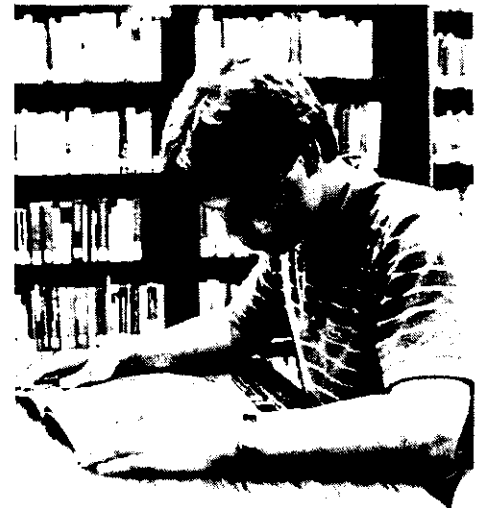
Additional programs are available for the high school student, dropout, and others with special needs. The colleges help each student design the educational program that best meets individual needs. Every student is offered intensive counseling to define goals and identify abilities. Continued guidance is available throughout the student's college career in case goals and plans change. This emphasis on counseling, rare for some institutions; is routine at all District colleges.

## DISTRICT RESPONSIBILITIES

To carry out the District philosophy, the colleges obviously must offer a range of programs and courses, including guidance services. These

programs and courses must help each individual attain a high level of technical competence and a high level of cultural, intellectual, and social development. In addition, high professional standards for the academic staff must be maintained within a framework prescribed by the Board of Trustees. At the same time, the program and organization of each college must make maximum use of faculty and facilities.

The colleges have a basic responsibility to provide educational and cultural leadership to the community. They must be sensitive to changing community needs and adapt readily to those needs. Individuals capable of continuing their educational development should be given the opportunity to improve their skills. Finally, to continue to meet its responsibilities in changing times, the college system must guard against stagnation. Creativity and flexibility are therefore fostered at the District level and on each campus.



## LEAGUE FOR INNOVATION

The Dallas County Community College District is a member of the League for Innovation in the Community College. The League is composed of 17 outstanding community college districts throughout the nation. Its purpose is to encourage innovative experimentation and the continuing development of the community college movement in America. Membership commits the District to research, evaluation, and cooperation with other community college districts. The goal is to serve the community with the best educational program and the fullest use of resources.

## **EQUAL EDUCATIONAL AND EMPLOYMENT OPPORTUNITY POLICY**

Dallas County Community College District is committed to providing equal educational and employment opportunity regardless of sex, marital or parental status, race, color, religion, age, national origin, or handicap. The District provides equal opportunity in accord with Federal and State laws. Equal educational opportunity includes admission, recruitment, extra-curricular programs and activities, access to course offerings, counseling and testing, financial aid, employment, health and insurance services, and athletics. Existing administrative procedures of the College are used to handle student grievances. When a student believes a condition of the College is unfair or discriminatory, the student can appeal to the administrator in charge of that area. Appeals to higher administrative authority are considered on the merits of the case.

## **FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974**

In compliance with the Family Educational Rights and Privacy Act of 1974, the College may release information classified as "directory information" to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone number, (4) dates of attendance, (5) educational institution most recently attended, and (6) other information, including major field of study and degrees and awards received.

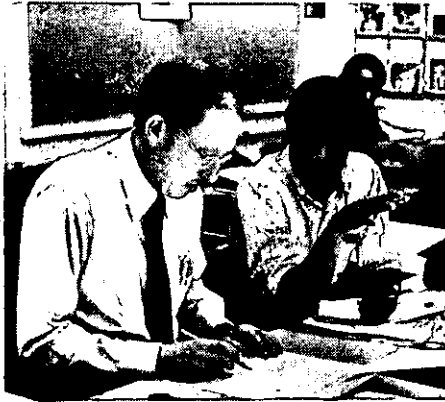
A student may request that all or any part of the directory information be withheld from the public by giving written notice to the Registrar's Office during the first twelve class days of a fall or spring semester or the first four class days of a summer session. If no request is filed, information is released upon inquiry. No telephone inquiries are acknowledged; all requests must be made in person. No transcript or academic record is released without written consent from the student stating the information to be given, except as specified by law.

## **STUDENT CONSUMER INFORMATION SERVICES**

Pursuant to Public Law 178, the College provides all students with information about its academic programs and financial aid available to students.

## **STANDARDS OF CONDUCT**

The college student is considered a responsible adult. The student's enrollment indicates acceptance of the standards of conduct published in this catalog.



## **II. ADMISSIONS AND REGISTRATION**

### **GENERAL ADMISSIONS POLICY**

The College has an "open door" admissions policy. It insures that all persons who can profit from post-secondary education have an opportunity to enroll. The College requires certain assessment procedures for use in course placement prior to admission to a certificate or degree program, but the assessment is not used to determine admissions.

### **ADMISSION REQUIREMENTS**

#### *Beginning Freshmen*

Students enrolling in college for the first time who fit one of the following categories may apply for admission:

- Graduates from an accredited high school or those who have earned a General Education Diploma (G.E.D.), who are 18 years of age or older, and whose high school class has graduated.
- Graduates of an unaccredited high school who are 18 years of age or older.
- Persons who do not hold a high school diploma or G.E.D. (but who are 18 years of age or older and whose high school class has graduated) may be admitted by giving evidence of an ability to profit from college instruction. Such admission will be on a probationary basis.
- High school seniors recommended by their high school principal. The College admits a limited number of students in this category. The students are concurrently enrolled for a maximum of 6 hours of

special study each semester. Students must continue to make normal progress toward high school graduation.

#### *Transfer Students*

Transfer applicants are considered for admission on the basis of their previous college record. Academic standing for transfer applicants is determined by the Registrar's Office according to standards established by the College. Students on scholastic or disciplinary suspension from another institution must petition the Committee on Admissions and Academic Relations for special approval. Contact the Admissions Office for further information.

#### *Former Students*

Students formerly enrolled in the Dallas County Community College District must submit an application for readmission to any District college. Students with unsettled financial debts at any District college will not be readmitted.

#### *Non-Credit Students*

Students enrolling for non-credit courses apply through Community Services.

#### *International Students*

The College is authorized under federal law to enroll non-immigrant alien students. International students are not admitted, however, until all admissions requirements are complete. International students must:

- complete a personal interview with the international student counselor and receive approval from the College administration,
- present TOEFL (Test of English as a Foreign Language) test scores of 525 or higher,
- be proficient in English and provide a letter in their own handwriting indicating educational and vocational plans,
- show evidence of sufficient financial support for the academic year,
- complete a health information form,
- fulfill all admission requirements for international students at least 30 days prior to registration,
- enroll as a full-time student (minimum of 12 credit hours),
- supply official transcripts for all previous academic work with a minimum "C" average.

Contact the Admissions Office for information.

## APPLICATION AND ADMISSION PROCEDURES

Applications may be submitted any time prior to registration, but applicants should submit materials at least three weeks before registration to insure effective counseling and schedule planning. Earlier application is desirable because the student's place in registration is determined by the date an applicant's admission file is complete. A late place in registration may mean that the student cannot register for some courses because they are already filled.

Applicants must submit the following material to the Admissions Office to have a complete admissions file:

- An official application, available from the Admissions Office.
- An official transcript from the last school (high school or college) attended. Students seeking certificates or associate degrees must submit official transcripts of all previous college work. The College's accrediting agency requires transcripts, and the College uses them in program advisement.
- Written proof from a medical office of (1) a negative tuberculin skin test or chest X-ray, (2) a polio immunization if the applicant is under 19 years of age, and (3) a diphtheria/tetanus injection within the last 10 years.

This medical proof is required by state law (Tex. ED. Code 2.09). Once the above materials are submitted, the applicant is assigned a place in registration. All applicants may select only those classes available when they register. Students may enroll in certain courses at times other than regular semester registration. See Flexible Entry Courses in this catalog and contact the Registrar's Office for additional information.

## TUITION

Tuition is charged on a sliding scale according to the number of credit hours for which a student is enrolled and the student's place of legal residence. Tuition is subject to change without notice by the Board of Trustees or the Texas Legislature.

## ADDITIONAL FEES

Additional fees may be assessed as new programs are developed with special laboratory costs. These fees will always be kept to a practical minimum. A graduation fee is not assessed, but each student must pay for cap and gown rental.

## SPECIAL FEES AND CHARGES

**Laboratory Fee:** \$2 to \$8 a semester (per lab).

**Physical Education Activity Fee:** \$5 a semester.

**Bowling Class Fee:** Student pays cost of lane rental.

**Private Music Lesson Fee:** \*\$45 for one hour per week (maximum) for one course, \$25 for one half hour per week.

**Audit Fee:** The charge for auditing a course is the same as if the course were taken for credit, except that a student service fee is not charged.

**Credit by Examination:** A fee will be charged for each examination.\*\*

\* Available only to music majors enrolled for 12 hours or more.

\*\*This fee can change without prior notice.

## DALLAS COUNTY COMMUNITY COLLEGE DISTRICT TUITION AND STUDENT SERVICES FEE\* FALL AND SPRING SESSIONS

Semester	Dallas County			Out-of District			Out-of State, or Out-of-Country		
Cr. Hours	Tuition	Fee	Total	Tuition	Fee	Total	Tuition	Fee	Total
1	\$ 25	\$ 1	\$ 26	\$ 25	\$ 1	\$ 26	\$ 41	\$ 1	\$ 42
2	25	2	27	42	2	44	82	2	84
3	25	3	28	63	3	66	123	3	126
4	32	4	36	84	4	88	164	4	168
5	40	5	45	105	5	110	205	5	210
6	48	6	54	126	6	132	246	6	252
7	56	7	63	147	7	154	287	7	294
8	64	8	72	168	8	176	328	8	336
9	72	9	81	189	9	198	369	9	378
10	80	10	90	210	10	220	410	10	420
11	86	10	96	216	10	226	451	10	461
12	92	10	102	222	10	232	492	10	502
13	98	10	108	228	10	238	533	10	543
14	104	10	114	234	10	244	574	10	584
15	110	10	120	240	10	250	615	10	625
16	116	10	126	246	10	256	656	10	666
17	122	10	132	252	10	262	697	10	707
18	128	10	138	258	10	268	738	10	748
19	134	10	144	264	10	274	779	10	789
20	140	10	150	270	10	280	820	10	830

Semester Cr. Hours		DALLAS COUNTY*		OUT-OF-DISTRICT**		OUT-OF-STATE, OR OUT-OF-COUNTRY***	
1		25		30		45	
2		25		60		90	
3		30		90		135	
4		40		120		180	
5		50		150		225	
6		60		180		270	
7		64		184		310	
8		68		188		350	
9		72		192		390	

The following definitions are brief guidelines only; please discuss any questions regarding proper tuition classification with Admissions Office personnel.

A Dallas County resident is one who (1) resides in Dallas County and (2) qualifies as an in-state resident. Texas law defines an in-state resident as an individual "who is employed full-time in Texas for the 12-month period preceding registration." The Dallas County Community College District Board of Trustees has waived the difference in tuition between the out-of-state or out-of-district rates and Dallas County rates for a person and his/her dependents who owns real estate, business or personal, within Dallas County. For information on documents necessary to prove such ownership or dependency, consult the Admissions Office. Classification as a state resident or qualification for a waiver of out-of-state fees applies only to U.S. citizens or permanent resident aliens.

The DCCCD Board of Trustees defines an Out-of-District student as (1) a student eighteen (18) years of age or older who resides in a Texas county other than Dallas County or (2) a student who is less than eighteen (18) years of age whose parents live in a Texas county other than Dallas County. In either case, state residency requirements must be fulfilled (see above).

An out-of-state student is one who has come to Texas from out-of-state within the 12-month period prior to registration. Anyone who enrolls as an out-of-state student is presumed to remain out-of-state as long as the residence of the individual in Texas is for the purpose of attending school. An individual who would have been classified as a resident for the first five of the six years immediately preceding registration but who resided in another state for all or part of the year immediately preceding registration shall be classified as a resident student.

A foreign national on any other than a permanent resident visa must pay out-of-country tuition and fees.

\*The tuition schedule above is subject to change without notice by action of the District Board of Trustees or the State of Texas.

## REFUND POLICY

Student tuition and fees provide only a fraction of the cost of education. When students enroll in a class, they reserve places which cannot be made available to other students unless they officially drop the class during the first week of the semester. Also, the original enrollment of students represents a sizable cost to the District whether or not they continue in the class. Therefore, a refund is made only under the following conditions:

- a. No 100% refund is granted unless College error is involved.
  - b. An 80% refund of tuition and fees may be obtained through the date noted in the college calendar. An 80% refund may be given through the first two class days of a six-week summer session or fast track semester. Refunds for Flexible Entry Courses are considered through completion of the second day of class from the date of enrollment.
  - c. No refund is given for advanced placement or College Level Examination Program (CLEP) tests.
  - d. A physician's statement must be submitted along with petitions when medical reasons account for withdrawal. Requests for refunds must be submitted before the end of the semester for which the refund is requested.
  - e. No refund of less than \$4 for tuition and fees is made.
- Refund Petition Forms are available in the Counseling Center and the Office of the Vice President of Student Services. Students who believe their refund requests are due to extenuating circumstances beyond the limits of the refund policy should state explicitly their circumstances on the Refund Petition Form. All requests for refunds are referred to the Refund Petition Committee. The Committee's recommendations are made to the Vice President of Student Services who notifies the student of the action taken. Refund checks normally require a minimum of one month from date of approval for processing.

## RETURNED CHECKS

Checks returned to the Business Office must be paid with cash or a cashier's check within the time limits prescribed by the notification letter. An additional fee is added for returned checks.

If a check for tuition is returned by a bank for any reason, including stop payment, the college business office

may submit the check to the Justice of the Peace for appropriate legal action and collection. The Vice President of Student Services may also implement disciplinary procedures.

## ADVISEMENT PROCEDURES

Individual assessment of skill levels is an important part of student success in college. Therefore, the District has provided an assessment process available through the counseling centers at each of the District colleges. Information gained from assessment is used to advise students in the selection of courses which can provide the best possible opportunity for academic success. All students are required to go through an assessment process and should schedule it prior to initial registration. Developmental studies are available for students who need skill development in reading, writing, or math. Test data, transcripts, previous work, and counseling may be used to determine placement in this program.

## COURSE PREREQUISITES

Prerequisites are established for certain advanced courses to help assure that students have sufficient background in the subject area to maximize their probability of success in the course. The College recognizes that certain related life experiences may also provide necessary background for success in these courses. Therefore, the division chairperson is authorized to waive a course prerequisite.

## CHANGE OF SCHEDULE

Students should be careful in registering to schedule courses only for the days and hours they can attend. Students requesting class changes should contact the Registrar's Office during the time specified in the class schedule. No change is complete until it has been processed by the Registrar's Office.

## NON-CREDIT STUDENT (AUDIT)

A person who meets the admission requirements of the District may, with the consent of the division chairperson and instructor, enroll in a credit course as a non-credit student. A non-credit student may attend class, but may not receive a final grade or credit for a course. An instructor may give an examination if he determines the examination is an essential component of the learning process. The fee in a credit course is the same for a non-credit student as for a credit student.

## TRANSFER OF CREDITS

Transfer of credit is generally given for all passing work completed at accredited colleges and universities. The Registrar's Office evaluates all transfer credit. Transfer students admitted with a grade point deficiency cannot graduate until the deficiency is cleared by earning additional grade points. Credits earned in military service schools or through the U.S. Armed Forces Institute are reviewed by the Registrar and credit granted if applicable.

## DROPPING A COURSE OR WITHDRAWING FROM COLLEGE

To drop a class or withdraw from the College, students must obtain a drop or withdrawal form and follow the prescribed procedure. Should circumstances prevent a student from appearing in person to withdraw from the College, the student may withdraw by mail by writing to the Registrar. No drop or withdrawal requests are accepted by telephone. Students who drop a class or withdraw from the College before the semester deadline receive a "W" (Withdraw) in each class dropped. The deadline for receiving a "W" is indicated on the academic calendar. After that time students receive a performance grade in each course.



## ADDRESS CHANGES AND SOCIAL SECURITY NUMBER

Each student has the responsibility to inform the Registrar's Office of changes in name or address. Each applicant for admission is asked to furnish a Social Security number. This number doubles as a student identification number and insures accuracy of student records. If a student does not have a Social Security number, another number is assigned for record keeping.

### **III. ACADEMIC INFORMATION**

#### **DEGREE REQUIREMENTS**

The College confers the Associate in Arts and Sciences Degree upon students who have completed all general and specific requirements for graduation. Each degree candidate must earn the last 15 hours as a resident student in the District colleges or accrue 45 hours in residence.

The degree must be awarded by the college which offers the program in which the student majored. If two or more schools offer the program, the student is granted the degree where the majority of the hours were taken. Correspondence work must be approved by the Registrar for graduation credit. No more than one-fourth of the work required for any degree or certificate may be taken by correspondence.

#### **ASSOCIATE IN ARTS AND SCIENCES DEGREE**

Students must have a minimum of 60 credit hours and a grade point average of at least "C" (2.0) to receive the Associate in Arts and Sciences Degree. These 60 hours may be earned at any District college. They must include:

- English 101-102 plus an additional 6 hours of English for a total of 12 credit hours in English.
- 8 credit hours in Laboratory Science (Music majors will substitute Music 101-102 for this requirement.)
- 12 credit hours of History 101-102 and Government 201-202. No substitutions are allowed. Only 3 credit hours of history and 3 credit hours of government may be earned through credit by examination. CLEP credit may not be used to meet this requirement.
- 3 credit hours in Humanities, selected from Theater 101, Art 104, Music 104, Humanities 101 or Philosophy 102.
- A maximum of 4 physical education activity hours may be counted as credit toward requirements for graduation. Courses numbered 99 and below cannot be included to meet degree or certificate requirements. Music 199, Art 199, and Theater 199 may not be counted toward the 60 hour minimum.

All students planning to transfer to a four-year institution may complete their four semester requirements in physical education during their freshman and sophomore year. Students are urged to consult the catalogs of the institutions to which they may transfer for their special requirements. These catalogs should

be used by students and advisors in planning programs.

#### **ASSOCIATE IN APPLIED ARTS AND SCIENCES DEGREE AND CERTIFICATE CAREER PROGRAMS**

Students must have a minimum of 60 credit hours and a grade point average of at least "C" (2.0) to receive the Associate in Applied Arts and Sciences Degree. For some programs, more than 60 credit hours are required. All prescribed requirements for the specific Technical/Occupational Program in which the student is enrolled must be completed. These programs may also have other criteria in addition to degree requirements.

See the Technical/Occupational Programs section of this catalog for a more detailed explanation.

The requirements for certificates are detailed under specific programs listed in the Technical/Occupational Programs section of this catalog. A "C" (2.0) grade point average is required. A maximum of 4 physical education activity hours may be counted as credit toward graduation. Courses numbered 99 and below may not be included to meet degree or certificate requirements. Music 199, Art 199, and Theatre 199 may not be counted toward the 60-hour minimum.

#### **PROCEDURE FOR FILING DEGREE AND CERTIFICATE PLANS AND FOR GRADUATION**

Students should request a degree plan from the Registrar's Office at the end of their freshman year. Official transcripts of all previous college work must be on file at the time of request for degree plans. Students following a one-year certificate program should request an official plan during the first semester of their enrollment. Application for the granting of the degree or certificate should be filed in the Registrar's Office prior to the deadline announced by the Registrar.

An annual graduation ceremony is held at the conclusion of the spring semester. Participation is ceremonial only and confers on a student no rights to a degree. January and August graduates may participate in the next commencement if they desire, but they are not required to do so. The Registrar's Office should be notified if the student wishes to participate. Instructions for graduation are mailed to all candidates thirty days prior to commencement.

Within five years of initial enrollment a student may graduate according to the catalog

requirements in effect at the time of first enrollment or any subsequent catalog provided the requisite courses are still being offered. If a student fails to complete within five years all requirements of the catalog in effect at the time of initial enrollment, then the student may be required to graduate under a later catalog at the discretion of the institution.

#### **RECOMMENDED ACADEMIC LOAD**

The maximum academic load is 18 credit hours of course work per semester or five classes plus physical education. Students must receive permission of the Registrar or the appropriate college official to carry a heavier load. Employed students carrying a full load (12 credit hours or more) should not work more than twenty hours per week. Students working more hours should reduce their academic load proportionately. The recommended load limit for day or evening students who are employed full-time is 6 credit hours. The recommended load limit in a six-week summer session is 6 credit hours. A total of 14 credit hours is the maximum that may be earned in any twelve-week summer period.

#### **CLASS ATTENDANCE**

Students are expected to attend regularly all classes in which they are enrolled. Students have the responsibility to attend class and to consult with the instructor when an absence occurs.

Instructors are responsible for describing attendance policy and procedures to all students enrolled in their classes. Students who do not attend class during the first twelve days of a long semester or the first four days of a summer session are dropped by the instructor. After this time, it is the responsibility of the student to withdraw from the course. A student, however, may be dropped from the class roll prior to the published withdrawal deadline notice for lack of attendance at the discretion of the instructor.

If an instructor drops a student, the student is notified by a letter from the Registrar's Office sent to the student's address of record. The effective drop date is stated in the letter. A student who desires to remain in class must contact the instructor within the time specified in the instructor's letter. With the instructor's approval, a student may be reinstated. Students dropped for excessive absences prior to the published withdrawal deadline receive a grade of "W."

## SCHOLASTIC STANDARDS: GRADES AND GRADE POINT AVERAGE

Final grades are reported for each student for every course according to the following grading system.

Grade	Interpretation	Grade Point Value
A	Excellent	4 points
B	Good	3 points
C	Average	2 points
D	Poor	1 point
F	Failing	0 points
I	Incomplete	Not Computed
WX	Progress; re-enrollment required	Not Computed
W	Withdrawn	Not Computed
CR	Credit	Not Computed

Grade points earned for each course are determined by multiplying the number of points for each grade by the number of credit hours the course carries. For example, a student who takes a three hour course and earns an "A" accumulates 12 grade points for that course. A student's *grade point average* is computed by adding the total grade point values for all courses and dividing by the number of credit hours attempted during the same period. For example, a student who takes the following courses and earns the following grades has a grade point average 2.93:

Credit Hours	Grade	Grade Points
2-hour course	A	8
3-hour course	B	9
4-hour course	B	12
3-hour course	C	6
Total Credit Hours:		Total Grade Points: 35
12		35
$35 \div 12 = 2.93$		

For repeated courses, only the latest grade earned is included in cumulative grade point averages. Transcripts do, however, indicate all work completed in the District, even if the latest grade is lower than a preceding grade. When a student withdraws from a course being repeated, the cumulative grade point average is calculated by using the immediately preceding grade in the same course.

If a student believes an error has been made in determining a course grade, the instructor or appropriate division office should be contacted as soon as possible. Requests for grade changes will not be considered later than two years following the last day of the semester for which the grade was assigned.

An incomplete grade "I" may be given when an unforeseen emergency prevents a student from completing the work in a course. The "I" must

be converted to a performance grade (one with a grade point value) within ninety days after the first day of classes in the subsequent regular semester. If the work is not completed after ninety days, the "I" is converted to a performance grade.

An *Incomplete Contract* is used to convert an incomplete grade to a performance grade and states the requirements for the satisfactory completion of the course. The Incomplete Contract must be agreed upon and signed by the instructor, the student and the division chairperson and submitted with the final grade report. When an Incomplete Contract must be submitted without the student's signature, the instructor must include a statement indicating that the student is aware of and in agreement with the contract.

Students who do not complete course requirements may receive a "WX" grade when the instructor determines that reasonable progress has been made and when the student can re-enroll for course completion prior to the certification date in the next regular semester. If the student re-enrolls and completes the course requirements, the "WX" remains for the first enrollment; a performance grade is given for the second enrollment. If the student does not re-enroll, the "WX" is converted to a performance grade.

## ACCEPTABLE SCHOLASTIC PERFORMANCE

College work is measured in terms of credit hours. The number of credit hours offered for each course is given with the course description. Acceptable scholastic performance is the maintenance of a grade point average of 2.0 (on a 4.0 scale) or better. Students may not be graduated from any degree or certificate program unless they have a cumulative grade point average of 2.0 or better. Grade points and hours earned in courses numbered 99 and below are included in computing a student's scholastic standing, but they cannot be used to meet graduation requirements.

## HONORS

Full-time students who complete at least 12 hours of credit and earn a grade point average of 3.00-3.49 are listed on the College's Honor Roll. Full-time students who complete at least 12 hours of credit and average 3.50-4.00 are placed on the Vice President's Honor List. Part-time students who take 6-11 credit hours and maintain a 3.5 or higher grade point average are placed on the Academic Recognition List.

## SCHOLASTIC PROBATION AND SCHOLASTIC SUSPENSION

Full-time and part-time students who have completed a total of 12 credit hours are placed on probation if they fail to maintain a 2.0 cumulative grade point average. Students may be removed from probation when they earn a 2.0 cumulative grade point average. Students on scholastic probation who achieve either a cumulative grade point average of 1.5 or above or a previous semester grade point average of 2.0 or above are continued on scholastic probation. Students on probation who do not meet the requirements for continued probation are placed on scholastic suspension. Students on suspension for the first time may not register for the immediately following semester or summer session without special permission. Suspended students must file a petition for readmission. The conditions for readmission are established and administered by the Vice President of Student Services.

## GRADE REPORTS

A grade report is issued to each student at the end of each semester and gives the grade earned in each course that semester. A transcript is the official record of college work and gives all grades earned throughout the college career. Transcripts are withheld from students who have not met financial or other obligations to the College. (See Student Codes and Expectations: "Financial Transactions with the College.")

## WAIVING OF SCHOLASTIC DEFICIENCY

Any student in an academic transfer program may transfer to a career program. In such a case, the student may choose to have any grades below "C" disregarded. However, the procedure for disregarding low grades may only be exercised while the student is in a career program. If the student changes to an academic transfer program, the original conditions of the academic transfer program must be followed, including the calculation of a cumulative grade point average of all college credits earned. The procedure for waiving scholastic deficiency applies both to students of this college and to students transferring from other institutions. The student who wishes to use the procedure for waiving scholastic deficiency should so state in writing to the Registrar prior to registration and should inform a counselor of such intentions during the pre-registration advisement session.



## TRANSCRIPTS OF CREDIT

Upon the written request of a student, the Registrar's Office will send an official transcript to the individual student or to any college or agency named. The transcript may be withheld, however, until the student has settled all obligations with the College.

## CLASSIFICATION OF STUDENTS

### *Freshman:*

A student who has completed fewer than 30 credit hours.

### *Sophomore:*

A student who has completed 30 or more credit hours.

### *Part-time:*

A student carrying fewer than 12 credit hours in a given semester.

### *Full-time:*

A student carrying 12 or more credit hours in a given semester.



## LEARNING RESOURCES CENTER AND LIBRARY OBLIGATIONS

The Learning Resources Center (LRC) supports classroom instruction. It is a place where students can find books and non-print materials to supplement classroom learning or where — if they choose — they can actually take a course. The LRC helps students to learn in their own ways and at their own speeds. It provides books, slides, tapes, and films. The College has a growing collection of books on a wide variety of general information areas to support Academic Transfer Programs and Technical/Occupational Programs. In addition, there are special collections of career materials and pamphlets. The library also subscribes to current popular and technical periodicals as well as to area and national newspapers.

Classroom Resource Services is a part of the LRC and supports the instructional program. It is responsible for all campus audio-visual equipment and non-print materials used in the classroom or by individual students and for the production of instructional materials.

Willful damage to library materials (or property) or actions disturbing users of the library may lead to the loss of library privileges. Damage cases are referred to the appropriate authorities for further action. All books and other library materials must be returned before the end of each semester. No transcript is issued until the student's library record is cleared.

## IV. EDUCATIONAL AND SPECIAL OPPORTUNITIES

### ACADEMIC TRANSFER STUDIES

Students who desire to earn a bachelor's degree may complete the first two years at this college before transferring to a four-year institution. The academic transfer curriculum is coordinated with senior colleges and universities to facilitate the transfer of credits to these schools.

### TECHNICAL/OCCUPATIONAL PROGRAMS

Students who desire to enter a chosen field as a skilled employee after one or two years of college work may enroll in one of the many Technical/Occupational Programs offered by the College.

Technical/occupational courses carry college credit leading to a Certificate of Completion or an Associate in Applied Arts and Sciences Degree. These programs are established only after studies verify that employment opportunities will exist at the time the student completes training.

The College attempts to match the community's labor requirements with the ambitions and goals of its students. This realistic approach to occupational education is made possible by the excellent cooperation of local industry, business, and public agencies. They increasingly depend on District colleges to supply skilled personnel. A continuous liaison is maintained with prospective employers to help place graduates and to keep the training programs

current with job requirements. Recommendations for adding new programs to the College offerings are made periodically and are based on community studies which identify additional training needs.

### CREDIT BY EXAMINATION

Students who believe they already meet the requirements of a course by experience or previous training may request credit by examination. The Counseling Center has a list of courses available through this method. The examination may be a section of the College Level Examination Program (CLEP), Advanced Placement Exams (CEEB), or a teacher-made test, depending on the course.

The student pays an examination fee for each course examination. This fee must be paid prior to taking the examination and is not refundable. The colleges credit by examination program is coordinated with similar programs of four-year institutions. Final acceptance of credit by examination for specific degree purposes is determined by the degree-granting institution. Students planning to use credit by examination to meet degree requirements at other institutions should check the requirements of the *receiving* institution.

Students must be currently enrolled at this college to receive credit by examination. Students may not request credit by examination in courses for which they are currently enrolled. Students may earn as many credits through examination as their ability permits and needs require, but the last 15 credit hours required for graduation in any degree or certificate program may not be earned through credit by examination except as approved by the Vice President of Instruction.

Credit by examination may be attempted only one time in any given course, and a grade of "C" or better must be earned in order for credit to be recorded. A student may use credit by examination for only three (3) credit hours to apply toward the degree requirements in history and only three (3) credit hours to apply toward the degree requirements in government.

(CLEP exam does not meet this requirement.)



## NON-TRADITIONAL LEARNING

The College is committed to serve students and the community in the most effective manner possible while maintaining high standards of education. Students learn in a variety of ways and through a multitude of experiences; therefore, the College shall assess these learning activities and grant equivalent college credit according to the following guidelines:

1. A student must be currently enrolled in the College to receive equivalent credit for non-traditional learning.
2. Credit may be granted for non-traditional learning as it relates to specific courses offered by the college assessing the learning experiences. Credit will be awarded on a course by course basis only.
3. A student is required to complete at least 12 semester hours of course work with the District prior to awarding of equivalent credits for non-traditional activities. The "CR" grade is awarded for non-traditional course work accepted for credit.
4. Credit may be granted for occupational courses approved by the Texas Education Agency.
5. The number of equivalent credits awarded may not exceed the total number of credits required for the student's specific associate degree objective. No graduation, residency, degree or program requirements will be waived as a result of credits earned as provided by this policy.

Students desiring to take advantage of this opportunity should consult with the College Advocate For Non-traditional Learning for additional information. Students making application for assessment of prior learning through life experiences are required to enroll in a Human Development Course to facilitate the process.

## FLEXIBLE ENTRY COURSES

In keeping with its commitment to meet individual educational needs, the College makes available Flexible Entry Courses. These courses are often self paced, allowing students to work at their own speed. Students are cautioned to be aware of the time specified by the College as to when the course requirements need to be completed. Students may register for Flexible Entry Courses during the pre-semester registration periods or at regular times during the semester. Students should check with the Registrar to determine times for

registration in these courses. Approval must be obtained for enrollment.

## TELECOURSES

Students may take a variety of college credit courses via television. The schedule of telecourses varies each semester and may include courses in anthropology, astronomy, business, earth science, ecology, biology, English, economics, government, history, humanities, psychology, religion, and sociology. Content and credit for these courses are the same as for similar courses taken on campus.

Telecourses include the viewing of television programs on KERA/Channel 13 and on cable, plus reading, study guide and writing assignments. Students come to the campus for an orientation session at the beginning of the semester, for one to four discussion meetings, for three or four tests, and for laboratory sessions in science courses having laboratories. These campus visits are normally scheduled for a time convenient to the students. Field trips are required in some courses. Telecourses may be taken in conjunction with on-campus courses or by persons who are not enrolled in any on-campus courses. Students may register for telecourses by mail or through the regular on-campus registration process.

## COOPERATIVE WORK EXPERIENCE EDUCATION

Students may enrich their education in certain career programs by enrolling in Cooperative Work Experience Courses. These courses allow students to combine classroom study with on-the-job experience at training stations approved by the College. Students must have completed at least two courses in their occupational major to be eligible for Cooperative Work Experience.

A full-time student (carrying 12 credit hours or more) must take two courses which relate to the student's work experience, and a maximum of 4 credit hours may be in Cooperative Work Experience. Part-time students (carrying under 12 credit hours) may take a maximum of 4 credit hours of work experience. They must be concurrently enrolled in a course related to their work experience (or a support course to be applied toward their occupational degree or certificate).

To enroll in a Cooperative Work Experience Course, students must have the approval of their instructor/coordinator. Course credit

is awarded at the rate of 1 credit hour for each 80 hours of approved work experience during the semester. The 80 hours is approximately 5 hours per week during a fall or spring semester.

Additional information regarding Cooperative Work Experience may be secured from the Cooperative Education Office. The Technical/Occupational Programs having work experiences are indicated in the Course Descriptions Section of this catalog.

## INTERNATIONAL STUDIES

Selected programs combine learning experiences with foreign travel. This travel-study is under the direct supervision of the faculty. These courses support specific learning objectives, and college credit may be earned by students who successfully meet the objectives.

## HUMAN DEVELOPMENT

In Human Development Courses students can explore the relationship between meaningful education and some of the dilemmas or questions commonly brought to college. "Why learn" and "how to learn" are put in a perspective of "who is to learn." These courses are taught by counselors and other qualified instructors. They offer academic credit which transfers to most surrounding four-year institutions. The courses in human development enhance the total curriculum and blend in with the total concept of the community college.

## EVENING AND WEEKEND COLLEGE

In dynamic, growing communities such as those encompassing this college, people have continuing educational needs, yet many of them have work schedules and personal involvements which make it impossible for them to attend college during normal daytime hours. For this reason, evening and weekend college courses offer the same broad spectrum of programs available for full-time day students. Courses are offered both on campus and at selected community locations.

Evening and weekend courses offer high quality instruction, excellent facilities, and a variety of student services, including counseling, health, library, bookstore, food services, financial aid, and recreation. Instructors are selected from the College's own full-time staff, from outstanding Dallas area educators, and from other professional specialists interested in teaching. To enroll in the evening and weekend

courses, contact the Director of Admissions. Information may also be obtained by contacting the Extended Day Administration Office.

### **SERVICEMEN'S OPPORTUNITY COLLEGE**

In cooperation with other community colleges in the United States, colleges of the Dallas County Community College District participate in the Servicemen's Opportunity College. Through this program, students can plan an educational experience regardless of location requirements of the military. For further information, contact the Admissions Office.

### **COMMUNITY SERVICE PROGRAMS**

Community Service Programs are an important element in the concept of the community college. They greatly expand the available opportunities for persons of all ages to participate in college programs and activities. And courses are offered throughout the year to meet a variety of community needs.

Community Service Programs are offered in the following categories:

- Continuing education opportunities for individuals who want to broaden their knowledge or learn new skills for different occupational fields.
- Cultural and community enrichment studies for groups and individuals seeking to enhance their quality of life.
- Personal entertainment and recreation for individuals wishing to explore new activities for personal growth and enjoyment.
- Resources for industry, government and professional groups needing to supplement their own training and development programs.

Community Service Programs offer short courses, seminars, workshops, and institutes. The type of course offering is determined by the nature of the material, instructional approach, and needs of the requesting individuals or organizations. Generally there are no entrance requirements or examinations. Some courses may have age restrictions or may require a certain amount of experience for enrollment. Admission is on a first-come, first-served basis. All one need do to register is fill out the form and pay the fee. Classes and activities are held on campus and in a variety of locations throughout the community. Most classes and activities are conducted on weekday evenings, but many are also held on weekdays and weekends.

## **V. STUDENT SERVICES**

The College is committed to providing opportunities for each individual student's total educational development. Specific student services are integrated with the instructional program of the College to address individual needs for educational, personal, social, cultural, and career development.



### **STUDENT DEVELOPMENT AND ACTIVITIES**

The Student Development Office plans and presents programs and activities for the general campus population. Programs often are coordinated with the various instructional division to provide students with valuable educational experiences. Many programs and activities are offered to help the student develop life enriching skills. Other programs provide students with interesting and entertaining ways to spend leisure time on campus. The goal of all programs is to facilitate the development of cultured and well-rounded human beings. Student participation in the operation of programs is highly encouraged.

Community Service Program instructors are professional men and women from the community who have proven experience in their fields. Their objective is to share their knowledge, insight, and experience, and to insure that students acquire a greater perspective of the subject and have a meaningful experience. Although most Community Service Courses do not require textbooks, the nature of some special offerings do require the purchase of books or supplies. Students are notified of the need for texts and other materials at the first meeting.

Library privileges are available for Community Service students during the term they are registered. Contact the Community Service Office for further information.

### **CONTINUING EDUCATION UNITS (CEU'S)**

Although no college credit is awarded for Community Service class participation, Continuing Education Units are transcribed for successful completion of most courses. The CEU, by nationwide definition, is "ten contact hours of participation in an organized continuing adult education or extension experience under responsible sponsorship, capable direction, and qualified instruction." The CEU is a means of recording and accounting for the various continuing education activities one accumulates over a period of years.

### **GUIDANCE AND COUNSELING SERVICES**

Individuals may find the counseling services helpful as they make plans and decisions in various phases of their development. For example, counselors can assist students in selecting courses of study, determining transferability of courses, choosing or changing careers, gaining independence, and confronting problems of daily living. Confidential assistance is provided by the counseling staff in the following areas:

1. Career counseling to explore possible vocational directions, occupational information, and self-appraisals of interest, personality and abilities.
2. Academic advisement to examine appropriate choices of courses, educational plans, study skills, and transferability of courses.
3. Confidential personal counseling to make adjustment and life decisions about personal concerns.
4. Small group discussions led by counselors and focusing on such areas as interpersonal relationships, test anxiety, and assertiveness. Counselors will consider forming any type of group for which there is a demand.
5. Standardized testing to provide additional information about interests, personality and abilities needed in planning and making decisions.
6. Referral sources to provide indepth assistance for such matters as legal concerns, financial aid, tutoring, job placement, medical problems, or psychological problems.

## **TUTORING SERVICES**

For students needing special temporary assistance in course work, tutoring services are available. Students are encouraged to seek services through self referral as well as through instructor referral.

## **TESTING AND EVALUATION CENTER**

The Testing Center administers various tests. Types of tests include:

1. Psychological tests of personality, vocational interests, and aptitudes.
2. Academic tests for college instructional programs. Many courses are individualized and self-paced, permitting students to be tested at appropriate times.
3. Assessment tests for appropriate class placement. These tests are very strongly recommended to insure student success.
4. Tests for selected national programs.

## **HEALTH CENTER**

Health is the most fundamental human need, and a high standard of physical and mental health is a basic right of every human being. The Health Center helps maintain and promote the health of students, faculty, and staff. Services provided by the Health Center include education and counseling about physical and emotional health, emergency first aid treatment, referral services to community agencies and physicians, free tuberculin skin tests and other screening programs, and programs of interest to students and faculty. Students are encouraged to make an appointment with the nurse to discuss specific health problems. No information on a student's health is released without written permission from the student, except as required by law.

## **SERVICES FOR HANDICAPPED STUDENTS**

The Services for Handicapped Students Office offers a variety of support services to enable handicapped students to participate in the full range of college experiences. Services are arranged to fit the individual needs of the student and include interpreters, notetakers, tutors, mobility assistants, loan of wheelchairs, readers for the blind, and tape recorders. Handicapped students should contact the office at least one month before registration. The office will provide students with an orientation session and registration information. For

additional information, contact the Services for Handicapped Students Office or the Counseling Center.

## **STUDENT ORGANIZATIONS**

Information about participation in any organization may be obtained through the Student Development Office. The development of student organizations is determined by student interest.

Categories of organizations include:

- Co-curricular organizations pertinent to the educational goals and purposes of the College.
- Social organizations to provide an opportunity for friendships and promote a sense of community among students.
- Service organizations to promote student involvement in the community.
- Pre-professional and academic organizations to contribute to the development of students in their career fields.

## **INTERCOLLEGIATE ATHLETICS**

Participation on athletic teams is voluntary on a non-scholarship basis for students who meet requirements established by the Metro Athletic Conference. For more information regarding eligibility, rules, standards, and sports offered, contact the Physical Education Office.

## **INTRAMURAL SPORTS**

The College provides a campus intramural program for students and staff and encourages participation. For additional information contact the intramural director in the Physical Education Office or the Student Development Office.

## **HOUSING**

The College does not operate dormitories of any kind or maintain listings of available housing for students. Students who do not reside in the area must make their own arrangements for housing.

## **CAMPUS SECURITY**

Campus security is required by State law to "protect and police buildings and grounds of state institutions of higher learning." Because all laws of the state are in full force within the campus community, specially trained and educated personnel are commissioned to protect College property, personal property, and individuals on campus. Security officers are certified peace officers. They have the power to enforce all Texas laws and rules, regulations, and policies of the College, including the Code of Student Conduct.

## **VI. FINANCIAL AID**

Students who need financial aid to attend college can apply for grants, scholarships, loans, or job opportunities. These aid opportunities are provided in the belief that education should not be controlled by the financial resources of students.

Students needing financial assistance are encouraged to complete an application well in advance of registration for the semester they wish to attend. The Financial Aid Needs Analysis Forms take 8-10 weeks to process. Early application allows the Financial Aid Office to prepare a realistic financial aid package.

Some of the grant, scholarship, loan and job programs available to students are outlined in the following paragraphs. Contact the Financial Aid Office for detailed information about any program and deadlines for applying. Some of the colleges have established priority deadlines for state grants and scholarships.

### **PELL GRANT**

The PELL Grant is a federally funded program designed to help undergraduate pre-baccalaureate students continue their education. The purpose of this program is to provide eligible students with a "foundation" of financial aid to assist with the costs of attending college.

All students applying for financial assistance through the College must apply for a PELL Grant. Other types of financial aid may be awarded if the student applies and qualifies. Eligibility for PELL Grant is based on financial need and satisfactory academic progress. Applications and additional information concerning the PELL Grant Program are available in the Financial Aid Office and in the counseling offices of most high schools. The application process takes approximately 8-10 weeks. In response to the PELL Grant application, a Student Aid Report (SAR) will be mailed directly to the student. The student should immediately review the SAR to make sure it is correct and bring it to the Financial Aid Office. The exact amount of the PELL Grant award will depend upon the aid index on the SAR and the number of hours for which the student enrolls. In order to be eligible, a student must enroll for at least 6 credit hours each semester. Students must apply each year.

### **SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)**

The SEOG is a Federal program to help pre-baccalaureate students with eligibility based solely on need. The amount of a SEOG award depends on the individual student's needs, the total number of applicants, and funds available. To be eligible, students must enroll for at least 6 credit hours, make satisfactory progress toward their educational goal and have financial need. Students must apply each year for the SEOG.

### **TEXAS PUBLIC EDUCATIONAL GRANT (TPEG)**

The TPEG is a State program to assist students attending state-supported colleges. To be eligible, students must make satisfactory progress toward the educational goal and have financial need according to an approved needs analysis system. Grants are awarded by eligibility on a first-come, first-served basis for credit and some non-credit courses. Students must apply each year for the TPEG.

### **TEXAS PUBLIC EDUCATIONAL — STATE STUDENT INCENTIVE GRANT (TPE-SSIG)**

The TPE-SSIG is a state program. To qualify, students must enroll for at least 6 credit hours per semester, make satisfactory progress toward their educational goal, be a Texas resident, and have financial need. Grants are awarded by eligibility on a first-come, first-served basis. Student must apply each year for the TPE-SSIG.

### **HINSON-HAZLEWOOD COLLEGE STUDENT LOAN PROGRAM**

The Hinson-Hazlewood College Student Loan Program is a State operated, federally insured student loan program. To qualify, students must enroll on at least a half-time basis (6 credit hours in the fall or spring semester), be a Texas resident, and demonstrate financial need. Students must apply for all other types of aid before applying for this loan, and they must apply each year to renew the loan. New students must have applied for and been denied a Texas Guaranteed Student Loan before applying for this loan.

Repayment begins six months after the student ceases to be enrolled for at least one-half the normal course load.

Repayment may extend up to 10 years, but a minimum payment of \$50 a month is required. The interest rate is 9% a year (adjusted).

### **STUDENT EMPLOYMENT**

The College Work/Study Program is a Federal program to assist students through jobs both on and off campus. To be eligible, students must demonstrate financial need, be enrolled in 6 or more credit hours, and make satisfactory progress toward their educational goal. Students will generally work 20 hours per week. The Student Employment Program provides some jobs on campus for students who do not meet the financial need requirement of the College Work/Study Program. Students must be enrolled in 6 or more credit hours and make satisfactory progress toward their educational goal. Students will generally work 20 hours per week.

### **SOCIAL SECURITY ADMINISTRATION**

The Social Security Administration has offered benefits to students who met its criteria. However, most students who are not currently receiving Social Security Educational Benefits will not be eligible in Fall, 1982, because of a phase out of this program as part of the Omnibus Budget Reconciliation Act. Students need to contact the regional Social Security Administration Office regarding eligibility. The Admissions Office on campus acts as liaison between students and the Social Security Administration after eligibility has been established.

### **BUREAU OF INDIAN AFFAIRS**

The Bureau of Indian Affairs offers educational benefits to American Indian students. Students need to contact the regional Bureau of Indian Affairs Office regarding eligibility.

Bureau of Indian Affairs  
1100 Commerce - Room 2C44  
Dallas, Texas 75202

### **VOCATIONAL REHABILITATION**

The Texas Rehabilitation Commission offers assistance for tuition and fees to students who are vocationally handicapped as a result of a physically or mentally disabling condition. This assistance is generally limited to students not receiving other types of aid. For information, contact Texas Rehabilitation Commission, 13612 Midway, Suite 530, Dallas, Texas 75234.

### **VETERANS' BENEFITS PROGRAM**

The Veterans' Benefits Program is coordinated by the Veterans' Affairs Office of the College. Services of this office include counseling the veteran concerning benefits, Veterans Administration loans, Veterans Administration work study programs, financial problems, career counseling, and other areas related to the veteran's general welfare. When testing indicates that a veteran should enroll in developmental courses such as reading, writing, or math, the student may pursue these courses with no charge to his or her benefits. Tutoring services are also available to the veteran who is having learning difficulties in one or more subjects. The veteran student should be aware of some of the Veterans Administration guidelines. Violation of these guidelines causes complications in receiving monthly benefits or loss of those benefits.

1. Class attendance is mandatory. Failure to attend class results in suspension from class.
2. A veteran student who plans to enroll in developmental courses must be tested and show a need in basic skills before enrolling in these courses.
3. A veteran student enrolled in television courses must be pursuing more on-campus credit hours than hours taken by television.
4. A veteran student who has successfully completed credit hours at another college or university must submit a transcript from that college or university before applying for V.A. benefits. The transcript is evaluated and credit granted when applicable.
5. A veteran student must enroll in courses required for a degree program. Information on degree requirements may be obtained from the Registrar's Office.
6. A veteran student who withdraws or who is dropped from all courses attempted during a semester is considered as making unsatisfactory progress by the V.A. and may lose future benefits. A veteran student must also maintain a satisfactory grade point average as outlined in the catalog.

The above V.A. regulations are subject to change without notice. Students should contact the Veterans' Affairs Office in order to be aware of current regulations and procedures.

## HAZELWOOD ACT

Under the Hazelwood Act certain veterans who have exhausted remaining educational benefits from the Veterans Administration can attend Texas state-supported institutions and have some fees waived. To be eligible, students must have been residents of Texas at the time they entered the services, and have resided in Texas for at least the period of 12 months before the date of registration, have an honorable discharge and be ineligible for Federal Student Aid Programs. Applications for Federal Student Aid are available at the financial aid office and will take a minimum of eight weeks to process. To apply, students must submit a Hazelwood Act application, a copy of their discharge papers and a Student Aid Report stating ineligibility to the Financial Aid Office.

## TELEVISION COURSES

For financial aid purposes, T.V. courses are considered to be the same as correspondence courses by the Federal Government. Enrollment in T.V. courses may affect your financial aid award, therefore, please contact the financial aid office for additional information if you intend to enroll in any of these classes.

## SELECTIVE SERVICE

Students who are born after December 31, 1959, and who are required under the Military Selective Service Act to register for the draft, are required to file a statement of compliance and provide a copy of the registration acknowledgement letter from Selective Service to the Financial Aid Office. Female students must also file the statement of compliance. Failure to comply constitutes ineligibility to receive any grants, loans, or work assistance under Title IV of the Higher Education Act of 1965.

## ACADEMIC PROGRESS REQUIREMENT

Students who receive financial aid are required by government regulations to make measureable progress toward the completion of their course of study. For a detailed description of the requirements, contact the Financial Aid Office.

### *The 2.0 Grade Point average (GPA) Requirement*

- a. Students funded for full-time course loads must complete a full-time course load with a minimum GPA of 2.0 each semester an award is made.

- b. Students funded for part-time course loads are expected to achieve a minimum GPA of 2.0 on all courses funded each semester. No drops or withdrawals are allowed.

### *Academic Compliance*

- a. If the 2.0 GPA requirement is not met once, a warning notice is mailed to the student. Transfer students entering the District on probation are considered to be in this category.
- b. If the 2.0 GPA requirement is not met twice, no award is made for six months.
- c. A third chance may be approved at the discretion of the Financial Aid Director after the six-month suspension period. The student must sign acknowledgement of conditional approval before the award is made. If the 2.0 GPA requirement is not met three times, no award is made for two years.
- d. A fourth chance may be approved at the discretion of the Financial Aid Director after the two-year suspension period. If approved, the student must sign a warning notice before the award is made.

Students may appeal the Financial Aid Director's decisions to the Vice President of Student Service. The appeal must be in writing. The Financial Aid Office reserves the right to review and cancel awards at any time because of (1) failure to maintain an acceptable academic record, (2) failure to meet the minimum course load requirements, (3) changes in the financial status of the student or the student's family, or (4) failure by the student to meet any regulations governing the program from which the student is receiving aid. It is understood that the student is aware of the conditions under which aid is offered and agrees to meet all requirements.

## SHORT-TERM LOANS

The College offers students short-term loans. Normally, a loan would not exceed tuition, fees, and books, but check with the Financial Aid Office for further details. The loan must be repaid within sixty to ninety days or before the end of the semester in which the money is borrowed.

## JOB PLACEMENT SERVICES

The Placement Office is available to assist any student in job placement, either on or off-campus. Job openings are listed in the Placement Office. The Placement Office also works directly with students and community employers to locate jobs and students

qualified to fill them. Career placement assistance is available for students nearing the end of their course of study. In addition to listing full-time career opportunities, the Placement Office also assists students in developing resumes, preparing for interviews, and developing successful job search strategies.

# COMMUNITY COLLEGE DISTRICT STUDENT RIGHTS AND RESPONSIBILITIES

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### 1. General Provisions

#### a. Preamble

The primary goal of the District and its Colleges is to help students of all ages achieve effective living and responsible citizenship in a fast changing region, state, nation and world. The District's primary concern is the student. Each college attempts to provide an environment which views students in a wholistic manner encouraging and inviting them to learn and grow independently, stressing the process and the acquisition of skills. Such an environment presupposes both rights and responsibilities. Free inquiry and expression are essential parts of this freedom to learn and of room for growth and development. However, this environment also demands appropriate opportunities and conditions in the classroom, on the campus and, indeed, in the larger community. Students must exercise these freedoms with responsibility.

The responsibility to secure and to respect general conditions conducive to the freedom to learn and to grow is shared by all members of the college community. Dallas County Community College District has a duty to develop policies and procedures which provide and safeguard this liberty and this environment. The purpose of this statement is to enumerate the essential provisions for student freedom to learn and grow and the responsibilities which go with these liberties as established by the Dallas County Community College District Board of Trustees.

#### b. Scope

- (1) This code applies to individual students and states the function of student, faculty, and administrative staff members of the college in disciplinary proceedings.
- (2) The college has jurisdiction for disciplinary purposes over a person who was a student at the time he allegedly violated a Board policy, college regulation, or administrative rule.

c. **Definitions:** In this code, unless the context requires a different meaning:

- (1) "Class day" means a day on which classes before semester or summer session final examinations are regularly scheduled or on which semester or summer session final examinations are given;
  - (2) "Vice President of Student Services" means the Vice President of Student Services, his delegate(s) or his representative(s);
  - (3) "Director of Student Development" means the Director of Student Development, his delegate(s) or his representative(s);
  - (4) "Director of Campus Security" means the Director of Campus Security, his delegate(s) or his representative(s);
  - (5) "President" means the president of a college of the Dallas County Community College District;
  - (6) "Student" means a person enrolled in a college of the Dallas County Community College District, or a person accepted for admission to the college;
  - (7) All vice presidents, deans, associate deans, assistant deans, directors, and division chairmen of the college for the purposes of this code shall be called "administrators";
  - (8) "Complaint" is a written summary of the essential facts constituting a violation of a Board policy, college regulation or administrative rule;
  - (9) "Board" means the Board of Trustees, Dallas County Community College District;
  - (10) "Chancellor" means the Chancellor of the Dallas County Community College District;
  - (11) "Major violation" means one which can result in suspension or expulsion from the college or denial of degree;
  - (12) "Minor violation" means one which can result in any disciplinary action other than suspension or expulsion from the college or denial of degree.
- (d) The Vice President of Student Services may impose disciplinary action as follows:
- (i) For minor violations, any action authorized by this code in the section on **Penalties** (from 1-8, i.e. Admonition through Suspension of eligibility);
  - (ii) For major violations, any action authorized by this code in the section on **Penalties** (from 1-11, i.e. Admonition through Expulsion).

## 2. Acquaintance with Policies, Rules, Regulations

The Student Rights and Responsibilities statement is subject to change by action of the Board of Trustees. Each student is expected to be fully acquainted with all published policies, rules, and regulations of the College, copies of which shall be available to each student for review at the offices of the Vice President of Student Services and Student Development. The college will hold each student responsible for compliance with these policies, rules and regulations. The student is responsible for obtaining published materials to update the items in this statement. Students are also expected to comply with all federal, state and local laws. This principle extends to conduct off campus which is likely to have an adverse effect on the College or on the educational process.

## 3. Campus Regulations

a. **Basic Standard:** The basic standard of behavior requires a student

- (1) Not to violate any municipal, state, or federal laws, and
- (2) Not to interfere with or disrupt the orderly educational processes of any college of the Dallas County Community College District.

A student is not entitled to greater immunities or privileges before the law than those enjoyed by other citizens generally.

b. **Enumerated Standards:** The succeeding regulations describe offenses for which disciplinary proceedings may be initiated, but the college expects from its students a higher standard of conduct than the minimum required to avoid discipline. The college expects all students to obey the law, to show respect for properly constituted authority, to perform contractual obligations, to maintain absolute integrity and a high standard of individual honor in scholastic work, and to observe standards of conduct appropriate for a community of scholars. In short, a student enrolled in the college assumes an obligation to conduct himself in a manner compatible with the college function as an educational institution.

(1) **Student Identification:**

a. **Issuance and Use:** I.D. cards will be distributed during the first week of school and will be required for the following events and services: library usage, concerts, lectures, campus movies, use of student center facilities, voting in campus elections, and tickets for campus and community events. All I.D. cards are the property of the college and must be shown on request of a representative of the college. Students are required to be in possession of their I.D. cards at all times and are prohibited from loaning their I.D. cards to any other person for any reason. Likewise, it is prohibited to use any other card except the one issued by the college.

b. **Replacement Cards:** If lost, duplicate I.D. cards may be obtained in the business office by payment of a \$4.00 charge.

- (2) **Use of District Facilities:** Each college of the Dallas County Community College District is a public facility entrusted to the Board of Trustees and college officials for the purpose of conducting the process of education. Activities which appear to be compatible with this purpose are approved through a procedure maintained in the Student Development Office. Activities which appear to be incompatible or in opposition to the purposes of education are normally disapproved. It is imperative that decision be made prior to an event in order to fulfill the trust of the public. No public facility could be turned over to the indiscriminate use of anyone for a platform or forum to promote random causes. These reasonable controls are exercised by college officials for the use of facilities to ensure the maximum use of the college for the purpose for which it was intended. Therefore, anyone planning an activity at one of the colleges of the Dallas County Community College District which requires space to handle two or more persons to conduct an activity must have prior approval. Application forms to reserve space must be acquired through the Student Development Office. This office also maintains a statement on procedures for reserving space.
- (3) **Speech and Advocacy:** Students have the right of free expression and advocacy; however, the time, place, and manner of exercising speech and advocacy shall be regulated in such a manner to ensure orderly conduct, non-interference with college functions or activities, and identification of sponsoring groups or individuals. Meetings must be registered with the Student Development Office. An activity may be called a meeting when the following conditions prevail at that activity:

- (a) When two or more persons are sitting, standing, or lounging so as to hear or see a presentation or discussion of a person or a group of persons.
- (b) When any special effort to recruit an audience has preceded the beginning of discussions or presentations.
- (c) When a person or group of persons appears to be conducting a systematic discussion or presentation on a definable topic.

- (4) **Disruptive Activities:** Any activity which interrupts the scheduled activities or processes of education may be classified as disruptive; thus, anyone who initiates in any way any gathering leading to disruptive activity will be violating college regulations and/or state law.

The following conditions shall normally be sufficient to classify behavior as disruptive:

- (a) Blocking or in any other way interfering with access to any facility of the college.
- (b) Inciting others to violence and/or participating in violent behavior, e.g., assault; loud or vulgar language spoken publicly; or any form of behavior acted out for the purpose of inciting and influencing others.
- (c) Holding rallies, demonstrations, or any other form of public gathering without prior approval of the college.
- (d) Conducting any activity which causes college officials to be drawn off their scheduled duties to intervene, supervise or observe the activity in the interest of maintaining order at the college.

Furthermore, the Vice President of Student Services shall enforce the provisions of the Texas Education Code, Section 4.30 (following page).

### Education Code Section 4.30 provides:

- (a) No person or group of persons acting in concert may willfully engage in disruptive activity or disrupt a lawful assembly on the campus or property of any private or public school or institution of higher education or public vocational and technical school or institute.
- (b) For the purposes of this section, disruptive activity means
  - (1) Obstructing or restraining the passage of persons in an exit, entrance, or hallway of any building without the authorization of the administration of the school;
  - (2) Seizing control of any building or portion of a building for the purpose of interfering with any administrative, educational, research, or other authorized activity;
  - (3) Preventing or attempting to prevent by force or violence or the threat of force or violence any lawful assembly authorized by the school administration;
  - (4) Disrupting by force or violence or the threat of force or violence a lawful assembly in progress; or
  - (5) Obstructing or restraining the passage of any person at an exit or entrance to said campus or property or preventing or attempting to prevent by force or violence or by threats thereof the ingress or egress of any person to or from said property or campus without the authorization of the administration of the school.
- (c) For the purposes of this section, a lawful assembly is disrupted when any person in attendance is rendered incapable of participating in the assembly due to the use of force or violence or due to a reasonable fear that force or violence is likely to occur.

(d) A person who violates any provisions of this section is guilty of a misdemeanor and upon conviction is punishable by a fine not to exceed \$200 or by confinement in jail for not less than 10 days nor more than 6 months, or both.

(e) Any person who is convicted the third time of violating this section shall not thereafter be eligible to attend any school, college, or university receiving funds from the State of Texas for a period of two years from such third conviction.

(f) Nothing herein shall be construed to infringe upon any right of free speech or expression guaranteed by the Constitutions of the United States or the State of Texas.

- (5) **Drinking of Alcoholic Beverages:** Each college of the Dallas County Community College District specifically forbids the drinking of or possession of alcoholic beverages on its campus.
- (6) **Drugs:** Each college of the Dallas County Community College District specifically forbids the illegal possession, use, sale or purchase of drugs, narcotics, or hallucinogens on or off campus.
- (7) **Gambling:** State law expressly forbids gambling of any kind on state property.
- (8) **Hazing:** Each college of the Dallas County College District, as a matter of principle and because it is a violation of state law, is opposed to and will endeavor to prevent hazing activities which involve any of the following factors singly or in conjunction:
  - (a) Any actions which seriously imperil the physical well-being of any student (all walks and all calisthenics are held to be actions which seriously imperil the physical well-being of students and are, therefore, accordingly specifically prohibited).
  - (b) Activities which are by nature indecent, degrading, or morally offensive.
  - (c) Activities which by their nature may reasonably be assumed to have a degrading effect upon the mental or moral attitude of the persons participating therein.

The institutional policy is one discouraging all activities incompatible with the dignity of the college student and exercising disciplinary correction over such of activities as escape from reasonable control, regulation, and decency. From the institution's point of view, the responsibility for the control of hazing activities, if engaged in by an organization, rests in the elected and responsible officials of the group, as individuals, and in the group as a whole, since it sets and approves the policy to be followed in these matters. It is accordingly recommended that all groups be informed that both their officers and the group as a whole, will be held singularly and collectively responsible for any actions considered to be unreasonable, immoral, and irresponsible with the policy limits detailed above. Individual activity falling in this category shall be handled on an individual basis and will result in disciplinary action.

### (9) Academic Dishonesty

- (a) The Vice President of Student Services may initiate disciplinary proceedings against a student accused of academic dishonesty.
- (b) "Academic dishonesty" includes, but is not limited to, cheating on a test, plagiarism and collusion.
- (c) "Cheating on a test" includes:
  - (i) Copying from another student's test paper;
  - (ii) Using, during a test, materials not authorized by the person giving the test;
  - (iii) Collaborating with another student during a test without authority;
  - (iv) Knowingly using, buying, selling, stealing, transporting or soliciting in whole or part the contents of an unadministered test.
  - (v) Substituting for another student, or permitting another student to substitute for one's self, to take a test; and
  - (vi) Bribing another person to obtain an unadministered test or information about an unadministered test.

(d) "Plagiarism" means the appropriation of another's work and the unacknowledged incorporation of that work on one's written work offered for credit.

(e) "Collusion" means the unauthorized collaboration with another person in preparing written work offered for credit.

### (10) Financial Transactions with the College

- (a) No student may refuse to pay or fail to pay debt he owes to the college.
- (b) No student may give the college a check, draft or order with intent to defraud the college.
- (c) A student's failure to pay the college the amount due on a check, draft, or order, on or before the fifth class after the day the business office sends written notice that the drawee has rightfully refused payment on the check, draft or order, is prima facie evidence that the student intended to defraud the college.
- (d) The Vice President of Student Services may initiate disciplinary proceedings against a student who has allegedly violated the provisions of this section.



#### (11) Other Offenses

- (a) The Vice President of Student Services may initiate disciplinary proceedings against a student who:
- (i) Conducts himself in a manner that significantly interferes with college teaching, research, administration, disciplinary proceedings or other college activities, including its public service functions, or with other authorized activities on college premises;
  - (ii) Damages, defaces or destroys college property or property of a member of the college community or campus visitor;
  - (iii) Knowingly gives false information in response to requests from the college;
  - (iv) Engages in hazing, as defined by state law and college regulations;
  - (v) Forges, alters or misuses college documents, records or I.D. cards;
  - (vi) Violates college policies or regulations concerning parking, registration of student organizations, use of college facilities, or the time, place and manner of public expression;
  - (vii) Fails to comply with directions of college officials acting in the performance of their duties;
  - (viii) Conducts himself in a manner which adversely affects his suitability as a member of the academic community or endangers his own safety or the safety of others;
  - (ix) Illegally possesses, uses, sells, or purchases drugs, narcotics, hallucinogens, or alcoholic beverages on or off campus;
  - (x) Commits any act which is classified as an indictable offense under either state or federal law.

#### 4. Disciplinary Proceedings

##### a. Administrative Disposition

###### (1) Investigation, Conference and Complaint

- (a) When the Vice President of Student Services' Office receives information that a student has allegedly violated a Board policy, college regulation, or administrative rule, the Vice President or a subordinate delegated by him shall investigate the alleged violation. After completing the preliminary investigation, the Vice President may:
- (i) Dismiss the allegations as unfounded, either before or after conferring with the student; or
  - (ii) Proceed administratively and impose disciplinary action; or
  - (iii) Prepare a complaint based on the allegation for use in disciplinary hearings along with a list of witnesses and documentary evidence supporting the allegation.
- (b) The President may take immediate interim disciplinary action, suspend the right of a student to be present on the campus and to attend classes, or otherwise alter the status of a student for violation of a Board policy, college regulation, or administrative rule, when in the opinion of such official the interest of the college would best be served by such action.
- (c) No person shall search a student's personal possessions for the purpose of enforcing this code unless the individual's prior permission has been obtained. Searches by law enforcement officers of such possessions shall be only as authorized by law.

###### (2) Summons

- (a) A student may be summoned to appear in connection with an alleged violation by sending him a letter by certified mail, return receipt requested, addressed to the student at his address appearing in the registrar's office records. It is the student's responsibility to immediately notify the registrar's office of any change of address.
- (b) The letter shall direct the student to appear at a specified time and place not less than three class days after the date of the letter. The letter shall also describe briefly the alleged violation and shall state the Vice President of Student Services' intention to handle the allegation as a minor or major violation.
- (c) The Vice President of Student Services may place on disciplinary probation a student who fails without good cause to comply with a letter of summons, or the Vice President may proceed against the student as stated below in the sections of **Disposition and Penalties**.

###### (3) Disposition

- (a) At a conference with a student in connection with an alleged minor or major violation, the Vice President shall advise the student of his rights.
- (b) A student may refuse administrative disposition of the alleged violation and, on refusal, is entitled to a hearing. If a student accepts administrative disposition, he shall sign a statement that he understands the nature of the charges, his right to a hearing or to waive the same, the penalty imposed, and his waiver of the right of appeal.

- (c) The Vice President of Student Services shall prepare an accurate, written summary of each administrative disposition and forward a copy to the student (and, if the student is a minor, to the parent or guardian of the student), to the Director of Student Development and to the Director of Campus Security.
- (d) The Vice President of Student Services may impose disciplinary action as follows:
- (i) For minor violations, any action authorized by this code in the section on **Penalties** (from 1-11, i.e. Admonition through Expulsion).

##### b. Student Discipline Committee

###### (1) Composition; Organization

- (a) When a student refuses administrative disposition of either a major or a minor violation, he is entitled to a hearing before the Student Discipline Committee. This request must be made in writing on or before the sixth working day following administrative disposition. The Committee shall be composed of **equal numbers of students, administrators and faculty** of the college. The committee shall be appointed by the President for each hearing on a rotating basis or on a basis of availability.
- (b) The Student Discipline Committee shall elect a Chairman from the appointed members. The Chairman of the committee shall rule on the admissibility of evidence, motions, and objections to procedure, but a majority of the committee members may override the Chairman's ruling. All members of the Committee are eligible to vote in the hearing.
- (c) **Chairman:** The Chairman shall set the date, time, and place for the hearing and may summon witnesses, and require the production of documentary and other evidence.
- (d) The Vice President of Student Services shall represent the college before the Student Discipline Committee and present evidence to support any allegations of violations of Board policy, college regulation, or administrative rules. The Vice President of Student Services may be assisted by legal counsel when in the opinion of the Vice President of Student Services the best interests of the student or the college would be served by such assistance.

###### (2) Notice

- (a) The Committee Chairman shall by letter notify the student concerned of the date, time and place for the hearing. The letter shall specify a hearing date not less than three (3) nor more than ten (10) class days after the date of the letter. If the student is under 18 years of age, a copy of the letter shall be sent to the parents or guardian.
- (b) The Chairman may for good cause postpone the hearing so long as all interested parties are notified of the new hearing date, time and place.
- (c) The Student Discipline Committee may hold a hearing at any time if the student has actual notice of the date, time, and place of the hearing, and consents in writing thereto, and the President, or his designated representative in his absence, states in writing to the committee that, because of extraordinary circumstances the requirements are inappropriate.
- (d) The notice shall specify whether the charge or charges are considered minor violations or major violations; shall direct the student to appear before the committee on the date and at the time and place specified, and shall advise the student of the following rights:
- (i) To a private hearing;
  - (ii) To appear alone or with legal counsel (if charges have been evaluated as a major violation or if the college is represented by legal counsel);
  - (iii) To have his parents or legal guardian present at the hearing;
  - (iv) To know the identity of each witness who will testify against him;
  - (v) To cause the committee to summon witnesses, require the production of documentary and other evidence possessed by the college, and to offer evidence and argue in his own behalf;
  - (vi) To cross-examine each witness who testifies against him;
  - (vii) To have a stenographer present at the hearing to make a stenographic transcript of the hearing, at the student's expense, but the student is not permitted to record the hearing by electronic means;
  - (viii) To appeal to the Faculty-Student Board of Review, subject to the limitations established by the Faculty-Student Board of Review section.

- (e) The Vice President of Student Services may suspend a student who fails without good cause to comply with a letter sent under this section, or, at his discretion, the Vice President of Student Services may proceed with the hearing in the student's absence.

###### (3) Preliminary Matters

- (a) Charges arising out of a single transaction or occurrence, against one or more students, may be heard together or, either at the option of the Committee or upon request by one of the students-in-interest, separate hearings may be held.
- (b) At least three (3) class days before the hearing date, the student concerned shall furnish the Committee Chairman with:
- (i) The name of each witness he wants summoned and a description of all documentary and other evidence possessed by the college which he wants produced;
  - (ii) An objection that, if sustained by the Chairman of the Student Discipline Committee, would prevent the hearing;
  - (iii) The name of legal counsel, if any, who appear with him;
  - (iv) A request for a separate hearing, if any, and the grounds for such a request.
- (c) When the hearing is set under waiver of notice or for other good cause determined by the Committee Chairman, the student concerned is entitled to furnish the information described in paragraph (b) hereof at any time before the hearing begins.

###### (4) Procedure

- (a) The hearing shall be informal and the Chairman shall provide reasonable opportunities for witnesses to be heard. The college may be represented by staff members of the Vice President of Student Services' office, legal counsel and other persons designated by the President. The hearing shall be open to the public so long as space is available, but may include the following persons on the invitation of the student:
- (i) Representatives of the College Council;
  - (ii) A staff member of the College newspaper;
  - (iii) Representatives of the Faculty Association;
  - (iv) Student's legal counsel, and
  - (v) Members of the student's immediate family.
- (b) The Committee shall proceed generally as follows during the hearing:
- (i) The Vice President of Student Services shall read the complaint;
  - (ii) The Vice President of Student Services shall inform the student of his rights, as stated in the notice of hearing;
  - (iii) The Vice President of Student Services shall present the College's case;
  - (iv) The student may present his defense;
  - (v) The Vice President of Student Services and the student may present rebuttal evidence and argument;
  - (vi) The Committee will vote the issue of whether or not there has been a violation of Board policy, college regulation or administrative rule; if the Committee finds the student has violated a Board policy, college regulation or administrative rule, the Committee will determine an appropriate penalty;
  - (vii) The Committee will inform the student of the decision and penalty, if any;
  - (viii) The Committee shall state in writing each finding of a violation of Board policy, college regulation or administrative rule, and the penalty determined. Each committee member concurring in the finding and penalty shall sign the statement. The Committee may include in the statement its reasons for the finding and penalty.

###### (5) Evidence

- (a) Legal rules of evidence shall not apply to hearings before the Student Discipline Committee, and the Committee may admit and give probative effect to evidence that possesses probative value and is commonly accepted by reasonable men in the conduct of their affairs. The Committee shall exclude irrelevant, immaterial and unduly repetitious evidence. The Committee shall recognize as privileged communications between a student and a member of the professional staff of the Health Center, Counseling and Guidance Center, or the Office of the Vice President of Student Services where such communications were made in the course of performance of official duties and when the matters discussed were understood by the staff member and the student to be confidential. Committee members may freely question witnesses.

- (b) The Committee shall presume a student innocent of the alleged violation until it is convinced by clear and convincing evidence that the student violated a Board policy, college regulation or administrative rule.
- (c) All evidence shall be offered to the Committee during the hearing and made a part of the hearing record. Documentary evidence may be admitted in the form of copies of extracts, or by incorporation by reference. Real evidence may be photographed or described.
- (d) A student defendant may not be compelled to testify against himself.
- (6) **Record**
- (a) The hearing record shall include: a copy of the notice of hearing; all documentary and other evidence offered or admitted in evidence; written motions, pleas, and any other materials considered by the Committee; and the Committee's decisions.
- (b) If notice of appeal is timely given as hereinafter provided, the Vice President of Student Services, at the direction of the Committee Chairman, shall send the record to the Board of Review, with a copy to the student appellant on or before the tenth class day after the notice of appeal is given.
- b. Faculty-Student Board of Review**
- (1) **Right to Appeal**
- (a) In those cases in which the disciplinary penalty imposed was as prescribed in the section on **Penalties**, (6) Restitution through (11) Expulsion, the student may appeal the decision of the Student Discipline Committee, or the decision of the President in an interim action to the Faculty-Student Board of Review. Disciplinary actions taken under the section on **Penalties**, (1) Admonition through (5) Bar against readmission, cannot be appealed beyond the Student Discipline Committee. A student appeals by giving written notice to the Vice President of Student Services on or before the third class day after the day the decision or action is announced. This notice may be informal, but shall contain the student's name, the date of the decision or action, the name of his legal counsel, if any, and a simple request for appeal.
- (b) Notice of appeal timely given suspends the imposition of penalty until the appeal is finally decided, but interim action may be taken as authorized under the section on **Disciplinary Disposition** which authorizes the President to take immediate interim disciplinary action.
- (2) **Board Composition**
- (a) The President shall appoint Boards of Review to hear appeals under this code. Each such Board shall have three faculty representatives and two students appointed by the President in alphabetical rotation from available members of the Review Panel.
- (b) The Review Panel shall have twenty-five (25) members, selected as follows:
- (i) Fifteen (15) representatives from the faculty, recommended by the President of the Faculty Association and appointed by the President of the college for three-year staggered terms.
- (ii) Ten (10) students shall be appointed by the President of the college for one-year terms. Student members must have an overall 2.0 average on all college work attempted at the time of the nomination and must not have a discipline case pending.
- (c) The President shall instruct the Board of Review members on student disciplinary policies, rules, and hearing procedures as soon as practicable after the members are appointed.
- (3) **Consideration of Appeal**
- (a) The Board of Review shall consider each appeal on the record of the Student Discipline Committee and for good cause shown, original evidence and newly discovered evidence may be presented.
- (b) Upon timely appeal, the President shall select a Board of Review as aforesaid and shall notify the student appellant and the Vice President of Student Services in writing of the time, date, and place of the hearing as determined by the President.
- (c) The President will designate one of the members of the Board of Review to serve as chairman.
- (d) Appellate hearings will follow the procedure prescribed in this code.
- (e) The Board of Review will hear oral argument and receive written briefs from the student appellant and Vice President of Student Services or their representatives.
- (f) The Board of Review, after considering the appeal, may affirm the Student Discipline Committee's decision, reduce the penalty determined or otherwise modify the decision of the Student Discipline Committee, or dismiss the complaint.
- (g) The Board of Review shall modify or set aside the finding of violation, penalty or both, if the substantive rights of the student were prejudiced because the Student Discipline Committee's finding of facts, conclusions or decisions were:
- (i) In violation of a federal or state law, Board policy, college regulation, administrative rule, or authorized procedure;
- (ii) Clearly erroneous in view of the reliable probative and substantial evidence on the complete hearing; or
- (iii) Capricious, or characterized by abuse of discretion or clearly unwarranted exercise of discretion.
- (h) The Board of Review may not increase a penalty assessed by the Student Discipline Committee.
- (4) **Petition for Administrative Review**
- (a) A student is entitled to appeal in writing to the Board of Trustees through the President, the Chancellor, and the Chairman of the Board. The President shall automatically review every penalty of expulsion.
- (b) A petition for review is informal but shall contain, in addition to the information required, notice of appeal, the date of the Board of Review's action on the student's appeal and his reasons for disagreeing with the Board's action. A student shall file his petition with the President on or before the third class day after the day the Board of Review announces its action on the appeal. If the President rejects the petition, and the student appellant wishes to petition the Chancellor, he shall file the petition with the Chancellor on or before the third class day after the President rejects the petition in writing.
- (c) The President, the Chancellor, and the Board of Trustees in their review may take any action that the Student Discipline Committee is authorized to take. They may receive written briefs and hear oral argument during their review.
- 4. Penalties**
- a. Authorized Disciplinary Penalties:** The Vice President of Student Services, the Student Discipline Committee, or the Faculty-Student Board of Review may impose one or more of the following penalties for violation of a Board policy, college regulation, or administrative rule:
- (1) Admonition
  - (2) Warning probation
  - (3) Disciplinary probation
  - (4) Withholding of transcript or degree
  - (5) Bar against readmission
  - (6) Restitution
  - (7) Suspension of rights or privileges
  - (8) Suspension of eligibility for official athletic and non-athletic extracurricular activities
  - (9) Denial of degree
  - (10) Suspension from the college
  - (11) Expulsion from the college
- b. Definitions:** The following definitions apply to the penalties provided above:
- (1) An "Admonition" is a written reprimand from the Vice President of Student Services to the student on whom it is imposed.
  - (2) "Warning probation" indicates that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires.
  - (3) "Disciplinary probation" indicates that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires. Students will be placed on disciplinary probation for engaging in activities such as the following: being intoxicated, misuse of I.D. card, creating a disturbance in or on campus facilities, and gambling.
  - (4) "Withholding of transcript or degree" is imposed upon a student who fails to pay a debt owed the college or who has a disciplinary case pending final disposition. The penalty terminates on payment of the debt or final disposition of the case.
  - (5) "Bar against readmission" is imposed on a student who has left the college on enforced withdrawal for disciplinary reasons.
  - (6) "Restitution" is reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.
  - (7) "Disciplinary suspension" may be either or both of the following:
    - (a) "Suspension of rights and privileges" is an elastic penalty which may impose limitations or restrictions to fit the particular case.
    - (b) "Suspension of eligibility for official athletic and non-athletic extracurricular activities" prohibits, during the period of suspension, the student on whom it is imposed from joining a registered student organization; taking part in a registered student organization's activities, or attending its meetings or functions; and from participating in an official athletic or non-athletic extracurricular activity. Such suspension may be imposed for any length of time up to one calendar year. Students will be placed on disciplinary suspension for engaging in activities such as the following: having intoxicating beverages in any college facility; destroying state property or student's personal property; giving false information in response to requests from the college; instigating a disturbance or riot; stealing; possession, use, sale or purchase of illegal drugs on or off campus; any attempt at bodily harm, which includes taking an overdose of pills or any other act where emergency medical attention is required; and conviction of any act which is classified as a misdemeanor or felony under state or federal law.
  - (8) "Denial of Degree" may be imposed on a student found guilty of scholastic dishonesty and may be imposed for any length of time up to and including permanent denial.
  - (9) "Suspension from the College" prohibits, during the period of suspension, the student on whom it is imposed from being initiated into an honorary or service organization; from entering the college campus except in response to an official summons; and from registering, either for credit or for non-credit, for scholastic work at or through the college.
  - (10) "Expulsion" is permanent severance from the college. This policy shall apply uniformly to all of the colleges of the Dallas County Community College District.
- In the event any portion of this policy conflicts with the state law of Texas, the state law shall be followed.
- 6. Parking and Traffic**
- (a) Reserved Parking Areas**
- These reserved areas are designated by signs; all other parking areas are open and are non-reserved.
- (1) Handicapped persons, College visitors
  - (2) Motorcycles
- (b) Tow Away Areas**
- (1) Handicapped persons area
  - (2) Fire Lanes
  - (3) Parking or driving on campus in areas other than those designated for vehicular traffic
  - (4) Parking in "No Parking" zone
  - (5) Parking on courtyards
- (c) General Information**
- (1) College parking areas are regulated by state, municipal and campus statutes. College campus officers are commissioned to cite violators.
  - (2) All vehicles which park on the campus of the College must bear a parking decal emblem. The parking decal may be secured from the College Security Division or during fall and spring registration periods. No fee is charged for the decal.
  - (3) Placement of decal emblem:
    - (a) Cars: Lower left corner of rear bumper.
    - (b) Motorcycles, Motor Bikes, etc., Gas tank
  - (4) Campus Speed Limits\*
    - (a) 10 M.P.H. in parking areas
    - (b) 20 M.P.H. elsewhere on campus.
 \* Unless otherwise posted.
  - (5) All handicapped parking must be authorized and handicapped decal displayed on vehicle prior to parking in handicapped reserved areas.
- (d) Campus Parking and Driving Regulations**
- (1) The Colleges, acting by and through their Board of Trustees are authorized by state law to promulgate, adopt and enforce campus parking and driving regulations. Campus officers are commissioned police officers, and as such, all traffic and criminal violations are within their jurisdiction.
  - (2) The College has authority for the issuance and use of suitable vehicle identification insignia as permits to park and drive on campus. Permits may be suspended for the violation of campus parking and driving regulations.
  - (3) The College campus officers have the authority to issue the traffic tickets and summons of type now used by the Texas Highway Patrol. It is the general policy to issue these tickets for violations by visitors and persons holding no College permit. These tickets are returnable to the Justice of Peace Court in which the college is located. Furthermore the campus officers are authorized to issue campus citations which are returnable to the Department of Safety and Security at the Business Office.



- (4) Under the direction of the College President, the Department of Safety and Security shall post proper traffic and parking signs.
- (5) Each student shall file an application for a parking permit with the Security Office upon forms prescribed by the College.
- (6) These traffic regulations apply not only to automobiles but to motor bikes, motorcycles and ordinary bicycles.

(e) Procedures

- (1) All motor vehicles must be parked in the parking lots between the parking lines. Parking in all other areas, such as campus drives, curb areas, courtyards, and loading zones, will be cited.
- (2) Citations may be issued for:
  - (a) Speeding (the campus speed limit is 20 M.P.H. except where posted)
  - (b) Reckless driving
  - (c) Double parking
  - (d) Driving wrong way in one-way lane
  - (e) Parking in "No Parking" lane
  - (f) Improper parking (parts of car outside the limits of a parking space).
  - (g) Parking in wrong area (for example, handicapped or "No Parking" areas)
  - (h) Parking trailers or boats on campus
  - (i) Parking or driving on campus in areas other than those designated for vehicular traffic
  - (j) Violations of all state statutes regulating vehicular traffic.
  - (k) Failure to display parking permit
  - (l) Collision with another vehicle or any sign or immovable object
- (3) A citation is notice that a student's parking permit has been suspended. The service charge to reinstate the parking and driving permit must be paid at the Business Office. Failure to pay the service charge will result in the impoundment of a vehicle that is parked on campus and whose decal has been suspended.
- (4) A person who receives a campus citation shall have the right within ten days to appeal in writing to the Vice President of Business, accompanied by whatever reason the person feels that the citation should not have been issued.
- (5) If it becomes necessary to remove an improperly parked vehicle, an independent wrecker operator may be called. The owner of the vehicle will be charged the wrecker fee in addition to the service charge for reinstatement of driving and parking privileges.
- (6) Visitors to campus are also required to follow College regulations.
- (7) The service charge for reinstatement of the parking and driving permit will be \$5.00 per citation.
- (8) Four citations per car during an academic year will result in permanent suspension of parking and driving permit for the balance of that academic year. A new total commences on August 1 of each year.
- (9) The College is not responsible for the theft of vehicles on campus or their contents.



# General Education Technical/Occupational Course Descriptions



## IMPORTANT INSTRUCTIONS

- **All courses listed in this catalog are not available at every college.** This catalog contains descriptions of both General Education courses and Technical/Occupational courses offered collectively by the seven colleges of the Dallas County Community College District. The listing is alphabetical by course subject title.
- **Courses without notation are approved for availability at every college.** However, please check the current college class schedules for availability during any given semester.
- **All courses listed in this catalog may not be offered during the current year.** It is suggested that students plan their schedules with the help of a college counselor well in advance of registration.

### **ACCOUNTING (ACC) 131 (3)** BOOKKEEPING I (3 LEC.)

The fundamental principles of double-entry bookkeeping are presented and applied to practical business situations. Emphasis is on financial statements, trial balances, work sheets, special journals, and adjusting and closing entries. A practice set covering the entire business cycle is completed.

### **ACCOUNTING (ACC) 132 (3)** BOOKKEEPING II (3 LEC.)

Prerequisite: Accounting I 131. This course covers accruals, bad debts, taxes, depreciation, controlling accounts, and business vouchers. Bookkeeping for partnerships and corporations is introduced.

### **ACCOUNTING (ACC) 201 (3)** PRINCIPLES OF ACCOUNTING (3 LEC.)

This course covers the theory and practice of measuring and interpreting financial data for business units. Topics include depreciation, inventory valuation, credit losses, the operating cycle, and the preparation of financial statements. (This course is offered on campus and may be offered via television.)

### **ACCOUNTING (ACC) 202 (3)** PRINCIPLES OF ACCOUNTING II (3 LEC.)

Prerequisite: Accounting 201. Accounting procedures and practices for partnerships and corporations are studied. Topics include cost data and budget controls. Financial reports are analyzed for use by creditors, investors, and management.

### **ACCOUNTING (ACC) 203 (3)** INTERMEDIATE ACCOUNTING I (3 LEC.)

Prerequisite: Accounting 202. This course is an intensive study of the concepts, principles, and practice of modern financial accounting. Included are the purposes and procedures underlying financial statements.

### **ACCOUNTING (ACC) 204 (3)** MANAGERIAL ACCOUNTING (3 LEC.)

Prerequisite: Accounting 202. This course is a study of accounting practices and procedures used to provide information for business management. Emphasis is on the preparation and internal use of financial statements and budgets. Systems, information, and procedures used in management planning and control are also covered.

### **ACCOUNTING (ACC) 205 (3)** BUSINESS FINANCE (3 LEC.)

Prerequisites: Economics 201 or 202 and Accounting 201. This course focuses on the financial structure in the free enterprise system. Topics include interest rates, value analysis, the financing of business firms and government, and security markets. Financial requirements for decision-making and capital formation are analyzed.

### **ACCOUNTING (ACC) 207 (3)** INTERMEDIATE ACCOUNTING II (3 LEC.) This course continues Accounting 203. Principles and problems in fixed liabilities and the analysis and interpretation of supplementary statements are also included.

### **ACCOUNTING (ACC) 238 (3)** COST ACCOUNTING (3 LEC.)

Prerequisite: Accounting 202. The theory and practice of accounting for a manufacturing concern are presented. The measurement and control of material, labor, and factory overhead are studied. Budgets, variance analysis, standard costs, and joint and by-products costing are also included.

### **ACCOUNTING (ACC) 239 (3)** INCOME TAX ACCOUNTING (3 LEC.)

Prerequisite: Accounting 202 or the consent of the instructor. This course examines basic income tax laws which apply to individuals and sole proprietorships. Topics include personal exemptions, gross income, business expenses, non-business deductions, capital gains, and losses. Emphasis is on common problems.

### **ACCOUNTING (ACC)** (See Cooperative Work Experience) 703, 713, 803, 813 (3) 704, 714, 804, 814 (4)

### **ANTHROPOLOGY (ANT) 100 (3)** INTRODUCTION TO ANTHROPOLOGY (3 LEC.)

This course surveys the origin of mankind involving the processes of physical and cultural evolution, ancient man, and preliterate man. Attention is centered on fossil evidence, physiology and family/group roles and status.

### **ANTHROPOLOGY (ANT) 101 (3)** CULTURAL ANTHROPOLOGY (3 LEC.)

Cultures of the world are surveyed and emphasis given to those of North America. Included are the concepts of culture, social and political organization, language, religion and magic, and elementary anthropological theory. (This course is offered on campus and may be offered via television.)

### **ANTHROPOLOGY (ANT) 110 (3)** THE HERITAGE OF MEXICO (3 LEC.)

This course (cross-listed as History 110) is taught in two parts each semester. The first part of the course deals with the archaeology of Mexico beginning with the first humans to enter the North American continent and culminating with the arrival of the Spanish in 1519 A.D. Emphasis is on archaic cultures, the Maya, the Toltec, and Aztec empires. The second part of the course deals with Mexican history and modern relations between the United States and Mexico. The student may register for either History 110 or Anthropology 110 but may receive credit for only one of the two.

### **ART (ART) 103 (1)** INTRODUCTION TO ART (3 LAB.)

Materials and techniques of studio art are introduced for the non-major. Included are basic design concepts and traditional media. Laboratory fee.

### **ART (ART) 104 (3)** ART APPRECIATION (3 LEC.)

Films, lectures, slides and discussions focus on the theoretical, cultural and historical aspects of the visual arts. Emphasis is on the development of visual and aesthetic awareness.

### **ART (ART) 105 (3)** SURVEY OF ART HISTORY (3 LEC.)

This course covers the history of art from prehistoric time through the Renaissance. It explores the cultural, geophysical and personal influences on art styles.

### **ART (ART) 106 (3)** SURVEY OF ART HISTORY (3 LEC.)

This course covers the history of art from the Baroque period through the present. It explores the cultural, geophysical and personal influences on art styles.

**ART (ART) 110 (3)**

DESIGN I (2 LEC., 4 LAB.)

Basic concepts of design with two-dimensional materials are explored. The use of line, color, illusion of space or mass, texture, value, shape and size in composition is considered.

**ART (ART) 111 (3)**

DESIGN II (2 LEC., 4 LAB.)

Basic concepts of design with three-dimensional materials are explored. The use of mass, space, movement and texture is considered. Laboratory fee.

**ART (ART) 114 (3)**

DRAWING I (2 LEC., 4 LAB.)

This beginning course investigates various media, techniques and subjects. It explores perceptual and descriptive possibilities and considers drawing as a developmental process as well as an end in itself.

**ART (ART) 115 (3)**

DRAWING II (2 LEC., 4 LAB.)

Prerequisite: Art 114. This course is an expansion of Art 114. It stresses the expressive and conceptual aspects of drawing, including advanced compositional arrangements, a range of wet and dry media, and the development of an individual approach to theme and content.

**ART (ART) 116 (3)**

INTRODUCTION TO JEWELRY I (2 LEC., 4 LAB.)

Prerequisites: Art 110, Art 111, or the consent of the instructor. The basic techniques of fabrication and casting of metals are presented. Emphasis is on original design. Laboratory fee.

**ART (ART) 117 (3)**

INTRODUCTION TO JEWELRY II (2 LEC., 4 LAB.)

Prerequisite: Art 116. This course continues Art 116. Advanced fabrication and casting techniques are presented. Emphasis is on original design. Laboratory fee.

**ART (ART) 199 (1)**

ART SEMINAR (1 LEC.)

Area artists, critics and art educators speak with students about the work exhibited in the gallery and discuss current art styles and movements. They also discuss specific aspects of being artists in contemporary society. This course may be repeated for credit.

**ART (ART) 201 (3)**

DRAWING III (2 LEC., 4 LAB.)

Prerequisites: Art 110, Art 111, Art 115, Sophomore standing and/or permission of the division chair. This course covers the analytic and expressive drawing of the human figure. Movement and volume are stressed. Laboratory fee.

**ART (ART) 202 (3)**

DRAWING IV (2 LEC., 4 LAB.)

Prerequisites: Art 201, Sophomore standing and/or permission of the division chair. This course continues Art 201. Emphasis is on individual expression. Laboratory fee.

**ART (ART) 205 (3)**

PAINTING I (2 LEC., 4 LAB.)

Prerequisites: Art 110, Art 111, Art 115 or the consent of the instructor. This studio course stresses fundamental concepts of painting with acrylics and oils. Emphasis is on painting from still life, models and the imagination.

**ART (ART) 206 (3)**

PAINTING II (2 LEC., 4 LAB.)

Prerequisite: Art 205. This course continues Art 205. Emphasis is on individual expression.

**ART (ART) 208 (3)**

SCULPTURE I (2 LEC., 4 LAB.)

Prerequisites: Art 110, Art 111, Art 115 or the consent of the instructor. Various sculptural approaches are explored. Different media and techniques are used. Laboratory fee.

**ART (ART) 209 (3)**

SCULPTURE II (2 LEC., 4 LAB.)

Prerequisite: Art 208. This course continues Art 208. Emphasis is on individual expression. Laboratory fee.

**ART (ART) 215 (3)**

CERAMICS I (2 LEC., 4 LAB.)

Prerequisites: Art 110, Art 111, Art 115 or the consent of the instructor. This course focuses on the building of pottery forms by coil, slab and use of the wheel. Glazing and firing are also included. Laboratory fee.

**ART (ART) 216 (3)**

CERAMICS II (2 LEC., 4 LAB.)

Prerequisite: Art 215 or the consent of the instructor. Glaze technology is studied. Advanced problems in the creation of artistic and practical ceramic ware. Laboratory fee.

**ART (ART) 217 (3)**

WATERCOLOR I (2 LEC., 4 LAB.)

Prerequisites: Art 110, Art 111 and Art 115 or the consent of the instructor. Art 217 is a studio course exploring techniques in water base media. Emphasis is placed on exploration of a variety of modes and techniques as a means to original expression.

**ASTRONOMY (AST) 101 (3)**

DESCRIPTIVE ASTRONOMY (3 LEC.)

This course surveys the fundamentals of astronomy. Emphasis is on the solar system. Included is the study of the celestial sphere, the earth's motions, the moon, planets, asteroids, comets, meteors and meteorites. (This course is offered on campus and may be offered via television.)

**ASTRONOMY (AST) 102 (3)**

GENERAL ASTRONOMY (3 LEC.)

Stellar astronomy is emphasized. Topics include a study of the sun, the properties of stars, star clusters, nebulae, interstellar gas and dust, the Milky Way Galaxy and external galaxies.

**AVIATION MAINTENANCE****TECHNOLOGY (APM) 100 (5)**

AIRCRAFT BASIC SCIENCE (150 CONTACT HOURS)

This course covers mathematics and physics of flight used in computing aircraft weight and balance. It also is an introduction to mechanic's privileges and limitations, Federal Aviation Regulations, and forms and publications used by the aircraft industry.

**AVIATION MAINTENANCE****TECHNOLOGY (APM) 101 (5)**

APPLIED AIRCRAFT SCIENCE (150 CONTACT HOURS)

Aircraft hardware and materials, non-destructive testing, and precision measurements are presented. The fabrication and installation of fluid lines and fittings are included. Servicing methods and ground operations are also covered, as well as cleaning and corrosion control.

**AVIATION MAINTENANCE****TECHNOLOGY (APM) 102 (5)**

BASIC ELECTRICITY (150 CONTACT HOURS)

The nature and relationships of voltage, current, and resistance designed specifically for aircraft electrical systems are studied. Topics include batteries, generators, alternators, and motors. Service and maintenance are both emphasized. The interpretation of aircraft drawings, charts, and wiring diagrams is also covered.

**AVIATION MAINTENANCE****TECHNOLOGY (APM) 200 (5)**

AIRFRAME STRUCTURES (150 CONTACT HOURS)

This course introduces wooden structures for aircraft. Covering materials, finishes, and application procedures are included. Fuel systems, the use of oxyacetylene welding equipment, and the inspection of aircraft welds are also covered.

**AVIATION MAINTENANCE****TECHNOLOGY (APM) 201 (5)**

SHEET METAL STRUCTURES (150 CONTACT HOURS)

Sheet metal structures are the focus of this course. Included are honeycomb and laminated structures as well as doors and windows. The identification, selection, and installation of rivets and fasteners are also covered.

**AVIATION MAINTENANCE  
TECHNOLOGY (APM) 202 (5)**  
HYDRAULICS AND LANDING GEAR (150  
CONTACT HOURS)

Hydraulic and pneumatic principles are presented and applied to basic units and systems. Topics include wheels, tires, brakes, and fixed and retractable landing gear. Inspection, maintenance and repair are all stressed.

**AVIATION MAINTENANCE  
TECHNOLOGY (APM) 203 (5)**  
AIRFRAME ELECTRICAL  
SYSTEMS (150 CONTACT HOURS)

Electrical components and related wiring are studied. Topics include instrument systems, communications, navigation equipment, power requirements, and antenna use. Proper methods of installation, removal, disassembly, and repair are emphasized.

**AVIATION MAINTENANCE  
TECHNOLOGY (APM) 204 (5)**  
UTILITY SYSTEMS (150 CONTACT HOURS)

This course covers atmospheric conditions and their modification for cabin heating, cooling, ventilation, and pressurization. It is an introduction to protection systems for ice, rain, and fire. Emphasis is on assembly and rigging by the use of manuals to install, inspect, align, and balance structural components.

**AVIATION MAINTENANCE  
TECHNOLOGY (APM) 205 (5)**  
INSPECTION AND REVIEW (150 CONTACT  
HOURS)

Methods and procedures for completing required inspections are presented. Included is a review of all general and airframe material. FAA examinations for the Airframe Certificate are taken upon the completion of this course.

**AVIATION MAINTENANCE  
TECHNOLOGY (APM) 220 (5)**  
RECIPROCATING ENGINES (150 CONTACT  
HOURS)

This course focuses on the reciprocating engine. Topics include piston displacement, compression ratio, and horsepower calculations. The classification and description of engine types are also covered. Emphasis is on the disassembly, inspection, overhaul, assembly, and testing of reciprocating engines.

**AVIATION MAINTENANCE  
TECHNOLOGY (APM) 221 (5)**  
GAS TURBINE POWERPLANTS (150 CONTACT  
HOURS)

This course focuses on gas turbine engines. Basic operating principles are examined, the effects of temperature, pressure, volume, and velocities of the working gases are explored. Components and functions are identified. Emphasis is on the disassembly, inspection, assembly, and testing of turbine engines.

**AVIATION MAINTENANCE  
TECHNOLOGY (APM) 222 (5)**  
POWERPLANT ELECTRICAL  
SYSTEMS (150 CONTACT HOURS)

Powerplant systems and their parts are studied. Topics include powerplant magnetos and ignition systems, starter and generator systems, engine instrument systems, and engine fire protection systems. Emphasis is on the theory, construction, control, operation, maintenance, and servicing of these systems.

**AVIATION MAINTENANCE  
TECHNOLOGY (APM) 223 (5)**  
POWERPLANT ACCESSORY  
SYSTEMS (150 CONTACT HOURS)

Accessory systems are covered. Included are aircraft propellers and their control systems. Lubricating, induction and supercharging, cooling and exhaust systems are also included.

**AVIATION MAINTENANCE  
TECHNOLOGY (APM) 224 (5)**  
FUEL METERING AND  
TROUBLESHOOTING (150 CONTACT HOURS)

This course provides information about the various fuel systems used for aircraft engines. The principles, operation, overhaul, and repair of various carburetors and direct fuel injection units are presented. Emphasis is on the recognition, analysis, and elimination of common powerplant troubles as well as engine installation and removal.

**AVIATION MAINTENANCE  
TECHNOLOGY (APM) 225 (5)**  
POWERPLANT REVIEW AND  
INSPECTION (150 CONTACT HOURS)

Methods and procedures for completing an airworthiness inspection are the focus of this course. Included is a review of all general and powerplant material. FAA examinations for the Powerplant Certificate are taken at the completion of this course.

**AVIATION TECHNOLOGY  
(AVT) 110 (3)**  
INTRODUCTION TO AVIATION (3 LEC.) (48  
CONTACT HOURS)

This course introduces various aspects of the aviation industry. It covers the history, development, and advances in aircraft from balloon flight to the supersonic transport. The industry's economic and sociological effects on people and communities are also included. Special emphasis is on the origin and growth of airlines and the aviation industry.

**AVIATION TECHNOLOGY  
(AVT) 121 (3)**  
GROUND SCHOOL PRIVATE (3 LEC.) (48  
CONTACT HOURS)

This course includes the study of

Federal Aviation Regulations, flight dynamics, meteorology, navigation, use of the radio, and general service of aircraft. The course is designed to fulfill the Ground School Requirements for the FAA Private Pilot Certificate.

**AVIATION TECHNOLOGY  
(AVT) 122 (3)**  
AVIATION LAW (3 LEC.) (48 CONTACT HOURS)

Prerequisite: Aviation Technology 110 or concurrent enrollment in Air Transportation. Procedural laws and regulations are studied. Local, national, and international procedures are included as well as those relating both to public and private sectors of air commerce. Topics include the development of aviation law, regulatory agencies, and quasi-official study and advisory groups. Special emphasis is on flight procedures (flight plans), ports of entry, customs, clearances, contraband, quarantines, aviation hazards, and liabilities. The present legal structure and possible future changes are covered, including reciprocity agreements.

**AVIATION TECHNOLOGY  
(AVT) 123 (3)**  
GROUND SCHOOL COMMERCIAL (3 LEC.) (48  
CONTACT HOURS)

Prerequisite: Private Pilot Certificate. This course is an in-depth analysis of all topics covered in the Commercial Pilot written examination. Emphasis is on problem development and solutions. Advanced exercises are included in the areas of aircraft operation, meteorology, navigation, communications, theory and hazards of attitude instrument flight, flight physiology, and emergency procedures. This course is designed to fulfill the Ground School Requirements of the FAA for the Commercial Pilot Certificate.

**AVIATION TECHNOLOGY  
(AVT) 128 (3)**  
AERO ENGINES AND SYSTEMS (3 LEC.) (48  
CONTACT HOURS)

Prerequisite: Credit or concurrent enrollment in Aviation Technology 110, Electronics Technology 235, or the equivalent. Basic power plant types and principles of operation are presented. Reciprocating, rotary, jet, and rocket engines are included. Also covered are configurations, such as in-line, radial, vee and horizontally opposed, turbo-prop, turbo-jet, fan-jet, and ram-jet. Also included are numerous systems, such as the fuel, ignition, electrical, environmental, lubrication, hydraulics, pneumatics, fire detection and extinguishing, cooling, tachometer, monitoring, manual control, and power boosted systems.

**AVIATION TECHNOLOGY****(AVT) 135 (2)**

FLIGHT BASIC (9 LAB., 25 FLIGHT) (34 CONTACT HOURS)

This course provides 25 hours of flight instruction (15 hours dual, 10 hours solo flight). Two hours in the Synthetic Flight Trainer are required. A current Second-Class Medical Certificate is required. Flight and laboratory fee.

**AVIATION TECHNOLOGY****(AVT) 137 (1)**

FLIGHT PRIVATE PILOT (4 LAB., 20 FLIGHT) (24 CONTACT HOURS)

This course provides 20 hours of flight instruction (10 hours dual and 10 hours solo flight). Pre-flight instruction and briefing are included. Students receive credit for the course upon completion of the flight prerequisite for the Private Pilot Flight Examination. Flight and laboratory fee.

**AVIATION TECHNOLOGY****(AVT) 210 (4)**

FEDERAL AVIATION REGULATIONS, AIRSPACE AND AIR TRAFFIC CONTROL SERVICES (3 LEC., 4 LAB.) (52 CONTACT HOURS)

It is recommended that this course be taken concurrently with one of the ground school courses. This course is an in-depth study of Federal Aviation Regulations, Air Traffic Control Procedures, the National Airspace System, and NTSB Regulations. Rated pilots may take this course to prepare for the 24-month flight review. A total of 4 hours in the Synthetic Flight Trainer is required. Instruction is in the use of various radar services. Laboratory fee.

**AVIATION TECHNOLOGY****(AVT) 212 (3)**

AIRPORT MANAGEMENT (3 LEC.) (48 CONTACT HOURS)

Prerequisites: Required core courses and Business 136. The major functions of airport management are presented. Topics include the adequacy of facilities and services, organization, personnel, maintenance, planning and zoning, operations, revenues and expenses, public relations, ecology, and safety. A study of the socio-economic effect of airports on the communities they serve is also covered.

**AVIATION TECHNOLOGY****(AVT) 220 (3)**

AERO DYNAMICS (3 LEC.) (48 CONTACT HOURS)

Prerequisite: Credit or concurrent enrollment in Mathematics 196. The aeronautical applications of physical laws are studied. Areas considered include gravitational laws, forces and stresses, Bernoulli's principle, gyroscopic principles, and velocity-sonic relationships. The dynamics of airfoils,

high efficiency lift devices, energy conversion to reactive forces related to aerobatics, and precision flight are also covered.

**AVIATION TECHNOLOGY****(AVT) 221 (3)**

ADVANCED NAVIGATION (2 LEC., 2 LAB.) (64 CONTACT HOURS)

Prerequisite: Credit or concurrent enrollment in Aviation Technology 226 or the consent of the instructor. This course covers flight planning. Consideration is given to adverse atmospheric conditions, navigational capabilities, and safety. The course also includes the analysis of atmospheric maps, charts, and weather radar. The interpretation and use of all operational data are also presented. Laboratory fee.

**AVIATION TECHNOLOGY****(AVT) 223 (3)**

AIRLINE MANAGEMENT (3 LEC.) (48 CONTACT HOURS)

Prerequisites: Required core courses and Business 136. This course covers the organization, operation, and management of an airline. Topics include planning, facility requirements, financing, aircraft selection criteria, route feasibility studies, market and passenger trends, and population trends affecting load factors. Problems unique to airline operations are explored.

**AVIATION TECHNOLOGY****(AVT) 224 (3)**

GROUND SCHOOL INSTRUMENT (3 LEC.) (48 CONTACT HOURS)

Prerequisite: Private or Commercial Pilot Certificate. This course presents aircraft attitude control, flight procedures, and maneuvering by reference solely to cockpit instruments. Completion of this course will qualify the student to take the FAA Instrument Rating Written Examination.

**AVIATION TECHNOLOGY****(AVT) 225 (3)**

AVIATION MARKETING (3 LEC.) (48 CONTACT HOURS)

Prerequisites: Required core courses and Business 233. The significance and functions of marketing are stressed from the airline viewpoint. Topics include market research, sales, advertising and promotion concepts, traffic, demand analysis, and price determination theory.

**AVIATION TECHNOLOGY****(AVT) 226 (3)**

METEOROLOGY (3 LEC.) (48 CONTACT HOURS)

Basic concepts of meteorology are studied. Weather data and measuring devices are covered. Topics include weather maps and symbols, U.S.

Weather Bureau documents, structure and general circulation of the atmosphere, theories of air mass, fronts, pressure areas, temperature gradients and inversions, violent atmospheric activities, and ecological considerations.

**AVIATION TECHNOLOGY****(AVT) 227 (2)**

FLIGHT COMMERCIAL I (8 LAB., 30 FLIGHT) (38 CONTACT HOURS)

Prerequisite: Private Pilot Certificate. This course provides 30 hours of flight instruction (10 hours dual and 20 hours solo flight) to apply toward the Commercial Pilot Certificate. Pre-flight instruction and briefing are included. A current Second-Class Medical Certificate is required. Flight and laboratory fee.

**AVIATION TECHNOLOGY****(AVT) 228 (3)**

FLIGHT COMMERCIAL II (8 LAB., 46 FLIGHT) (54 CONTACT HOURS)

Prerequisite: Aviation Technology 227 and concurrent enrollment in Aviation Technology 123. This course provides 46 hours of flight instruction (10 hours dual instrument instruction, 6 hours dual instruction, and 30 hours of solo flight) to apply toward the Commercial Pilot Certificate. Pre-flight instruction and briefing are included, as are 5 hours of night flight. Flight and laboratory fee.

**AVIATION TECHNOLOGY****(AVT) 229 (3)**

FLIGHT COMMERCIAL III (4 LAB., 46 FLIGHT) (50 CONTACT HOURS)

Prerequisite: Aviation Technology 123 and 228. This course provides 46 hours flight instruction (6 hours dual flight, 30 hours solo flight, and 10 hours dual and practice flight in a more sophisticated aircraft) to fulfill flight-law requirements for the Commercial Pilot Certificate. Pre-flight instruction and briefing are included. Students receive course credit upon completion of the flight prerequisite to the Commercial Pilot Flight Examination. Flight and laboratory fee.

**AVIATION TECHNOLOGY****(AVT) 230 (3)**

FLIGHT COMMERCIAL IV-INSTRUMENT (26 LAB., 20 FLIGHT) (46 CONTACT HOURS)

Prerequisite: Private or Commercial Pilot Certificate. This course provides 45 hours of flight instruction (25 hours of instrument flight instruction and 20 hours instruction in an instrument, synthetic trainer). Pre-flight instruction and briefing are included. Laboratory fee.

**AVIATION TECHNOLOGY (AVT)****249 (3)****AIR TRANSPORTATION, TRAFFIC AND CARGO (3 LEC.)**

Prerequisites: Required core courses and credit or concurrent enrollment in Management 136. Transportation methods of passengers and cargo are examined. The need, nature and structure of the air transportation segment of the aviation industry are studied. Emphasis is on the diagnosis and solution of problems at terminals. Topics include air cargo, air mail, air express, air freight, air taxi, air carrier, commuter, business and pleasure.

**AVIATION TECHNOLOGY****(AVT) 250 (2)****FLIGHT INSTRUCTOR GROUND SCHOOL (2 LEC.) (32 CONTACT HOURS)**

Prerequisite: Commercial Pilot Certificate or Private Pilot Certificate with 200 hours logged flight time. Principles of flight and ground instruction are presented. Instructional techniques, analysis of maneuvers, and Federal Aviation Regulations are included. Completion of this course should qualify the student to pass the Flight Instructor Written Examination.

**AVIATION TECHNOLOGY (AVT)****251 (2)****FLIGHT INSTRUCTOR AIRPLANE/SINGLE OR MULTI-ENGINE (40 CONTACT HRS.)**

Prerequisite: Commercial pilot certificate or private pilot certificate with 200 hours logged flight time. This course focuses on the science of flight instruction. Evaluation of student performance and maneuver analysis are included. The required instructional flight disciplines are covered in order to qualify students for the FAA Flight Instructor Rating. Simulator fee. MVC ONLY

**AVIATION TECHNOLOGY (AVT)****252 (3)****INSTRUMENT FLIGHT INSTRUCTOR GROUND SCHOOL (48 CONTACT HRS.)**

Prerequisites: Instrument Rating and Commercial Pilot Certificate; pass written examination on airspace and regulations or concurrent enrollment in Aviation Technology 210. Instructional techniques of the Synthetic Flight Trainer are presented. Included are instrument flight rules, instrument charts, instrument procedures, and the use of aircraft instruments for instrument flight. Emphasis is on developing instructional techniques and materials. The course is designed to prepare students for the FAA Instrument Flight Instructor Flight Test and Written Test. Students will be required to conduct instruction in Synthetic Ground Trainers. MVC ONLY

**AVIATION TECHNOLOGY (AVT)****253 (1)****FLIGHT INSTRUCTOR-AIRPLANE INSTRUMENT (20 CONTACT HRS.)**

Prerequisite: Certified Flight Instructor Rating. This course includes 20 hours of flight training in the science of flight instruction including evaluation of student performance and maneuver analysis. The required flight disciplines that qualify the student for the FAA Flight Instructor-Airplane Instrument Rating are covered. Ten (10) hours in the Synthetic Flight Trainer are required. Flight and laboratory fee. MVC ONLY

**AVIATION TECHNOLOGY (AVT)****254 (1)****FLIGHT ADVANCED I (16 CONTACT HRS.)**

Prerequisite: A Private Pilot Certificate or a Commercial Pilot Certificate. This course includes 10 hours of flight instruction. All flying is in modern twin-engine aircraft and is designed to give the advanced pilot a greater depth of aircraft experience. The course includes pre-flight instruction and briefing. It leads to the FAA Multi-Engine Pilot Rating. Flight fee. MVC ONLY

**AVIATION TECHNOLOGY (AVT)****255 (3)****TYPE RATING TURBO JET GROUND SCHOOL (48 CONTACT HOURS)**

Prerequisites: Commercial Pilot Certificate and Instrument Rating. This course will provide an analysis of normal, abnormal and emergency operation of the flight control, engine, fuel, electrical, pneumatic, navigation and auxiliary systems and use of the manufacturer's performance data for a specific make and model (type) of small, multi-engine, turbo-jet powered airplane. A review of procedures related to pre-flight, takeoffs, enroute flight, landings, engine-out procedures, no-flap landings, collision avoidance and wake turbulence avoidance will also be included.

**AVIATION TECHNOLOGY (AVT)****256 (1)****FLIGHT ADVANCED II - JET TYPE RATING (13 CONTACT HOURS)**

Prerequisites: Commercial Pilot Certificate and Instrument Rating. This course includes ten hours of flight instruction, and ten hours of pre- and post-flight instruction. All flying is in a small multi-engine, turbo-jet powered airplane. It leads to the FAA Multi-Engine Jet airplane type rating. Flight fee.

**AVIATION TECHNOLOGY (AVT)****261 (3)****AIRCRAFT DISPATCHER I (48 CONTACT HRS.)**

This course includes a survey of FAA regulations and duties of an aircraft dispatcher plus basic flight planning for transport category aircraft. MVC ONLY

**AVIATION TECHNOLOGY (AVT)****262 (4)****PRACTICAL DISPATCHING (58 CONTACT HRS.)**

The content of this course is described in the current FAA Aircraft Dispatcher Circular. The content is designed to prepare the student for the FAA written exam for aircraft dispatcher. Ten hours are required in the Simulated Flight Trainer. (Simulated instrument flight hours can be accumulated both on and off campus but must be verified by the instructor.) Simulator fee. MVC ONLY

**AVIATION TECHNOLOGY (AVT)****263 (3)****FLIGHT ENGINEER GROUND SCHOOL (48 CONTACT HRS.)**

Prerequisites: Aviation Technology 261 and Aviation Technology 262 or the equivalent experience and/or credentials. This course includes FAA regulations; flight theory and aerodynamics, basic meteorology with respect to engine operations, center of gravity computations, airplane systems and equipment, and normal and emergency operating procedures. This information prepares the student for the flight engineer's written tests. Specific emphasis is placed on the Boeing 727 and Boeing 707 as aircraft which are used for flight engineer training by civil United States air carriers. MVC ONLY

**AVIATION TECHNOLOGY (AVT)****264 (3)****AIR TRANSPORT PILOT GROUND SCHOOL (48 CONTACT HRS.)**

Prerequisites: Aviation Technology 261 and Aviation Technology 262 or the equivalent experience and/or credentials. This course is designed to prepare the student for the Air Transport Pilot Written Test and includes operations of air carrier aircraft, navigation by instruments, the general system and material relative to weather information collection and dissemination, meteorology, weather conditions, air navigation facilities, airplane weather observations and influence of terrain on meteorological conditions, radio communications, and basic principles of loading and weight distribution. MVC ONLY

**AVIATION TECHNOLOGY (AVT)****270 (5)****ORIENTATION TO AIR TRAFFIC CONTROL (80 CONTACT HRS.)**

This course is designed to acquaint new employees with the FAA organization, the options within the air traffic



service, and the emergency readiness requirements. It provides a basic orientation to the history, structure, and functions of the FAA with emphasis on air traffic service. National, local, and individual policies and obligations are also presented. MVC ONLY

#### **AVIATION TECHNOLOGY (AVT)**

**272 (2)**

AIRCRAFT TYPES AND CHARACTERISTICS/  
AIR TRAFFIC CONTROL COMMUNICATIONS  
(32 CONTACT HRS.)

This course is designed to introduce developmental controllers to the information necessary to identify the types of aircraft by name or model by its physical characteristics and to state the normal range of operating speeds, altitudes, the weight class and category, as well as developing the ability to identify the procedures, phraseology, and discipline pertaining to radio communications in accordance with FCC regulations. Emergency communications and visual communications used by air traffic control facilities are also presented. MVC ONLY

#### **AVIATION TECHNOLOGY (AVT)**

**274 (3)**

AIR TRAFFIC COMPUTER OPERATIONS  
(48 CONTACT HRS.)

This course is designed to train the student to operate the components of the central computer complex in an enroute air traffic control center and includes computer operations, input and output devices and their operating characteristics and message format, content, and computer responses. MVC ONLY

#### **AVIONICS TECHNOLOGY (AV)**

**129 (3)**

INTRODUCTION TO AIRCRAFT ELECTRONIC  
SYSTEMS (2 LEC., 2 LAB.)

This course relates aircraft electronic systems to aircraft flight and navigation. Emphasis is on the operation and function of the electronic systems. The laboratory requirements include demonstrations of the operation of the systems and the use of some ramp test equipment. Laboratory fee.

#### **AVIONICS TECHNOLOGY (AV)**

**132 (4)**

AIRCRAFT ELECTRICAL AND ELECTRONIC  
SYSTEMS INSTALLATION (3 LEC., 3 LAB.)

Prerequisite: Avionics Technology 129. Suggested pre- or co-requisites: Electronics Technology 191 or Electronics Technology 135. This is a course of study and practical experience in the installing of avionic systems in aircraft, mounting of electronic equipment, construction and installation of electrical wiring and cables, proper use of tools,

selection of materials, and accepted methods and procedures to insure aircraft safety, mechanical integrity, electrical reliability, and compliance with applicable FAA regulations. Laboratory fee.

#### **AVIONICS TECHNOLOGY (AV)**

**235 (4)**

OPERATIONAL TESTING OF AIRCRAFT  
ELECTRONIC SYSTEMS (3 LEC., 3 LAB.)

Prerequisite: Avionics Technology 129. Suggested pre- or co-requisites: Electronics Technology 191 or Electronics Technology 135. This course integrates technical drawing interpretation, wiring interface checkout and the application of ramp test equipment in common usage. In the laboratory, the student will perform functional checks of aircraft electrical and electronic systems using appropriate procedures for determining the operating condition of the equipment and techniques for correcting equipment malfunctions. The students should gain practical experience in avionics equipment in the aircraft and on the bench. Laboratory fee.

#### **AVIATION TECHNOLOGY (AVT)**

#### **AVIONICS TECHNOLOGY (AV)**

#### **COOPERATIVE WORK EXPERIENCE**

**701, 711, 801, 811 (1)**

**702, 712, 802, 812 (2)**

**703, 713, 803, 813 (3)**

**704, 714, 804, 814 (4)**

#### **BIOLOGY (BIO) 101 (4)**

GENERAL BIOLOGY (3 LEC., 3 LAB.)

This course is a prerequisite for all higher level biology courses and should be taken in sequence. Topics include the cell, tissue, and structure and function in plants and animals. Laboratory fee.

#### **BIOLOGY (BIO) 102 (4)**

GENERAL BIOLOGY (3 LEC., 3 LAB.)

This course is a continuation of Biology 101. Topics include Mendelian and molecular genetics, evolutionary mechanisms, and plant and animal development. The energetics and regulation of ecological communities are also studied. Laboratory fee.

#### **BIOLOGY (BIO) 115 (4)**

BIOLOGICAL SCIENCE (3 LEC., 3 LAB.)

Selected topics in biological science are presented for the non-science major. Topics include the cell concept and basic chemistry as it relates to biology. An introduction to genetics, evolution, cellular processes, such as mitosis, meiosis, respiration, and photosynthesis, and plant and animal reproduction is also covered. Laboratory fee. (This course is offered on campus and may be offered via television.)

#### **BIOLOGY (BIO) 116 (4)**

BIOLOGICAL SCIENCE (3 LEC., 3 LAB.)

Selected topics in biological science are presented for the non-science major. Topics include the systems of the human body, disease, drug abuse, aging, evolution, ecology, and people in relation to their environment. Laboratory fee.

#### **BIOLOGY (BIO) 120 (4)**

INTRODUCTION TO HUMAN ANATOMY AND  
PHYSIOLOGY (3 LEC., 3 LAB.)

Prerequisite: Prior enrollment in Biology 115 is recommended for those with no previous high school biology. Major topics include cell structure and function, tissues, organization of the human body, and the following organ systems: skeletal, muscular, nervous, and endocrine. This course is a foundation course for specialization in Associate Degree Nursing and Allied health disciplines. Other students interested in the study of structure and function of the human body should consult a counselor. Emphasis is on homeostasis. Laboratory fee.

#### **BIOLOGY (BIO) 121 (4)**

INTRODUCTION TO HUMAN ANATOMY AND  
PHYSIOLOGY (3 LEC., 3 LAB.)

Prerequisite: Biology 120. This course is a continuation of Biology 120. Major topics include the following organ systems: digestive, circulatory, respiratory, urinary, and reproductive. Emphasis is on homeostasis. Laboratory fee.

#### **BIOLOGY (BIO) 203 (4)**

INTERMEDIATE BOTANY (3 LEC., 3 LAB.)

Prerequisites: Biology 101 and 102. The major plant groups are surveyed. Emphasis is on morphology, physiology, classification, and life cycles. Evolutionary relationships of plants to each other and their economic importance to humans are also covered. Laboratory fee.

#### **BIOLOGY (BIO) 211 (4)**

INVERTEBRATE ZOOLOGY (3 LEC., 3 LAB.)

Prerequisite: 8 hours of biological science. This course surveys the major groups of animals below the level of chordates. Consideration is given to phylogeny, taxonomy, morphology, physiology, and biology of the various groups. Relationships and importance to higher animals and humans are stressed. Laboratory fee.

#### **BIOLOGY (BIO) 216 (4)**

GENERAL MICROBIOLOGY (3 LEC., 4 LAB.)

Prerequisites: Biology 102 or Biology 121 or the consent of the instructor. Microbes are studied. Topics include growth, reproduction, nutrition, genetics and ecology of micro-organisms. Laboratory activities constitute a major part of the course. Laboratory fee.



**BIOLOGY (BIO) 221 (4)**

ANATOMY AND PHYSIOLOGY I (3 LEC., 3 LAB.)

Prerequisite: Biology 102 or the consent of the instructor. This course examines cell structure and function, tissues, and the skeletal, muscular, and nervous systems. Emphasis is on structure, function, and the interrelationships of the human systems. Laboratory fee.

**BIOLOGY (BIO) 222 (4)**

ANATOMY AND PHYSIOLOGY II (3 LEC., 3 LAB.)

Prerequisite: Biology 221 or the consent of the instructor. Second course of a two course sequence. Structure and function as related to the human circulatory, respiratory, urinary, digestive, reproductive, and endocrine systems. Emphasis is placed on the interrelationships of these systems. Laboratory fee.

**BLUEPRINT READING (BPR) 177 (2)**

BLUEPRINT READING (1 LEC., 3 LAB.) (64 CONTACT HOURS)

Engineering drawings are described and explained. Topics include multi-view projection, sections, auxiliaries, bill of materials, symbols, notes, conventions, and standards. The skills of visualization, dimensioning, and sketching of machine parts are covered.

**BLUEPRINT READING (BPR) 178 (2)**

BLUEPRINT READING (1 LEC., 3 LAB.) (64 CONTACT HOURS)

Prerequisite: Blueprint Reading 177. The different types of prints are read. More complex prints are included. Types of prints include machine, piping, architectural, civil, structural, electrical, electronic, numerical control documents, and aircraft. Calculations required in blueprint reading are emphasized.

**BUSINESS (BUS) 105 (3)**

INTRODUCTION TO BUSINESS (3 LEC.)

This course provides an overall picture of business operations. Specialized fields within business organizations are analyzed. The role of business in modern society is identified. (This course is offered on campus and may be offered via television.)

**BUSINESS (BUS) 143 (3)**

PERSONAL FINANCE (3 LEC.)

Personal financial issues are explored. Topics include financial planning, insurance, budgeting, credit use, home ownership, savings, investment, and tax problems.

**BUSINESS (BUS) 234 (3)**

BUSINESS LAW (3 LEC.)

This course presents the historical and

ethical background of the law and current legal principles. Emphasis is on contracts, property, and torts.

**BUSINESS (BUS) 237 (3)**

ORGANIZATIONAL BEHAVIOR (3 LEC.)

The persisting human problems of administration in modern organizations are covered. The theory and methods of behavioral science as they relate to organizations are included.

**BUSINESS (BUS)****COOPERATIVE WORK EXPERIENCE****701, 711, 801, 811 (1)****702, 712, 802, 812 (2)****703, 713, 803, 813 (3)****704, 714, 804, 814 (4)****CHEMISTRY (CHM) 101 (4)**

GENERAL CHEMISTRY (3 LEC., 3 LAB.)

Prerequisites: Developmental Mathematics 093 or equivalent and any one of the following: high school chemistry, Chemistry 115, or equivalent. This course is for science and science-related majors. It covers the laws and theories of matter. The laws and theories are used to understand the properties of matter, chemical bonding, chemical reactions, the physical states of matter, and changes of state. The fundamental principles are applied to the solution of quantitative problems relating to chemistry. Laboratory fee.

**CHEMISTRY (CHM) 102 (4)**

GENERAL CHEMISTRY (3 LEC., 3 LAB.)

Prerequisite: Chemistry 101. This course is for science and science-related majors. It is a continuation of Chemistry 101. Previously learned and new concepts are applied. Topics include solutions and colloids, chemical kinetics and equilibrium, electrochemistry, and nuclear chemistry. Qualitative inorganic analysis is also included. Laboratory fee.

**CHEMISTRY (CHM) 115 (4)**

CHEMICAL SCIENCES (3 LEC., 3 LAB.)

Prerequisite: Developmental Mathematics 091 or the equivalent. This course is for non-science majors. It traces the development of theoretical concepts. These concepts are used to explain various observations and laws relating to chemical bonding reactions, states of matter, solutions, electrochemistry, and nuclear chemistry. Also included is the descriptive chemistry of some common elements and inorganic compounds. Laboratory fee.

**CHEMISTRY (CHM) 116 (4)**

CHEMICAL SCIENCES (3 LEC., 3 LAB.)

Prerequisite: Chemistry 115 or the consent of the instructor. This

course is for non-science majors. It covers organic chemistry and biochemistry. The important classes of organic compounds are surveyed. The concept of structure is the central theme. Biochemistry topics include carbohydrates, proteins, lipids, chemistry of heredity, disease and therapy, and plant biochemistry. Laboratory fee.

**CHEMISTRY (CHM) 201 (4)**

ORGANIC CHEMISTRY I (3 LEC., 4 LAB.)

Prerequisite: Chemistry 102. This course is for science and science-related majors. It introduces organic chemistry. The fundamental types of organic compounds are presented. Their nomenclature, classification, reactions, and applications are included. The reactions of aliphatic and aromatic compounds are discussed in terms of modern electronic theory. Emphasis is on reaction mechanisms, stereo-chemistry, transition state theory, and organic synthesis. Laboratory fee.

**CHEMISTRY (CHM) 202 (4)**

ORGANIC CHEMISTRY II (3 LEC., 4 LAB.)

Prerequisite: Chemistry 201. This course is for science and science-related majors. It is a continuation of Chemistry 201. Topics include aliphatic and aromatic systems, polyfunctional compounds, amino acids, proteins, carbohydrates, sugars, and heterocyclic and related compounds. Instrumental techniques are used to identify compounds. Laboratory fee.

**CHEMISTRY (CHM) 203 (4)**

QUANTITATIVE ANALYSIS (2 LEC., 6 LAB.)

Prerequisite: Chemistry 102, Mathematics 101 or Mathematics 104 or the equivalent. Principles for quantitative determinations are presented. Topics include gravimetry, oxidation-reduction, indicators, and acid-base theory. Gravimetric and volumetric analysis is emphasized. Colorimetry is introduced. Laboratory fee.

**COLLEGE LEARNING SKILLS****(CLS) 100 (1)**

COLLEGE LEARNING SKILLS (1 LEC.)

This course is for students who wish to extend their learning skills for academic or career programs. Individualized study and practice are provided in reading, study skills and composition. This course may be repeated for a maximum of three credits.

**COMMUNICATIONS (COM) 131 (3)**

APPLIED COMPOSITION AND SPEECH (3 LEC.)

Communication skills are studied as a means of preparing for one's vocation. Practice in writing letters, applications, resumes, and short reports is included.

**COMMUNICATIONS (COM) 132 (3)**  
APPLIED COMPOSITION AND  
SPEECH (3 LEC.)

Prerequisite: Communications 131 or consent of instructor. The study of communication processes is continued. Emphasis is on written persuasion directly related to work. Expository techniques in business letters and documented reports are covered. Practice in oral communication is provided.

**COMPUTING SCIENCE (CS) 174 (3)**  
FUNDAMENTALS OF COMPUTING (3 LEC.)

Prerequisite: Two years high school algebra or Developmental Mathematics 093. This course is an introductory course designed primarily for students desiring credit towards a minor or major in computer science or other scientific field. It includes a study of algorithms and an introduction to a procedure-oriented language with general applications.

**COMPUTING SCIENCE (CS) 175 (3)**  
INTRODUCTION TO COMPUTER SCIENCE (3 LEC.)

This course is an introduction to the fundamentals of information processing machines. Topics include history of computers, vocabulary, cultural impact, development of basic algorithms, number systems, and applications of elementary programming logic made through the use of the BASIC programming language.

**COMPUTING SCIENCE (CS) 181 (3)**  
INTRODUCTION TO FORTRAN  
PROGRAMMING (2 LEC., 2 LAB.)

Prerequisites: Computing Science 174 or Computing Science 175 and Math 101 or the consent of the instructor based on equivalent experience. This course is an introduction to computing techniques using the FORTRAN language. Emphasis is on applications used to solve numeric problems in engineering, physical science, and mathematics. Laboratory fee.

**COMPUTING SCIENCE (CS) 182 (3)**  
INTRODUCTION TO BASIC PROGRAMMING (2 LEC., 2 LAB.)

Prerequisites: Computing Science 174 or Computing Science 175 or the consent of the instructor based on equivalent experience. An introduction to the BASIC programming language. Proficiency will be developed as the student codes and executes several BASIC programs using interactive computing equipment. Laboratory fee.

**COMPUTING SCIENCE (CS) 183 (3)**  
INTRODUCTION TO PL/1 PROGRAMMING (2 LEC., 2 LAB.)

Prerequisites: Computing Science 174 or Computing Science 175 or the

consent of the instructor based on equivalent experience. Study of PL/1 language with numeric and non-numeric applications. Computing techniques will be developed in such areas as program design, basic aspects of string processing, recursion, internal search/sort methods, and simple data structures. Laboratory fee.

**COMPUTING SCIENCE (CS) 184 (3)**  
INTRODUCTION TO COBOL PROGRAMMING  
(2 LEC., 2 LAB.)

Prerequisites: Computing Science 174 or Computing Science 175 or the consent of the instructor based on equivalent experience. An introduction to the COBOL programming language. Topics will include algorithmic processes, problem solving methods, programming style, flow charts, and various files processing techniques. Emphasis is on the language, its flexibility and power rather than on applications. Laboratory fee.

**COMPUTING SCIENCE (CS) 185 (3)**  
INTRODUCTION TO PASCAL PROGRAMMING  
(2 LEC., 2 LAB.)

Prerequisites: Computing Science 174 or Computing Science 175 and Math 101 or the consent of the instructor based on equivalent experience. This course is an introduction to PASCAL. Topics will include problem solving and structured programming techniques introduced through examples from applications such as text processing, numerical computing, and simulation, together with programming assignments. Laboratory fee.

**COMPUTING SCIENCE (CS) 186 (3)**  
INTRODUCTION TO ASSEMBLY LANGUAGE (2 LEC., 2 LAB.)

Prerequisites: Computing Science 174 or Computing Science 175 and six semester hours of computer programming or the consent of the instructor based on equivalent experience. This course is an introduction to ASSEMBLY language programming. Topics will include machine representation of data and instructions, logical input/output control systems, subroutine and addressing concepts, and presentation of selected macro instructions. Laboratory fee.

**COMPUTING SCIENCE (CS) 250 (3)**  
CONTEMPORARY TOPICS IN COMPUTER  
SCIENCE (3 LEC.)

Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Recent developments and topics of current interest are studied. Topics may include introduction to

micro/mini computer systems, programming languages, or other advanced data processing concepts such as CICS. May be repeated when topics vary.

**COMPUTING SCIENCE (CS) 251 (4)**  
SPECIAL TOPICS IN COMPUTER SCIENCE (3 LEC., 3 LAB.)

Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of computer science and data processing are studied. Such topics may include advanced programming language concepts in BASIC, RPG II and RPG III, and PASCAL, or advanced data entry concepts. May be repeated when topics vary. Laboratory fee.

**COOPERATIVE WORK EXPERIENCE**

**701, 711, 801, 811 (1)**  
**702, 712, 802, 812 (2)**  
**703, 713, 803, 813 (3)**  
**704, 714, 804, 814 (4)**  
**723, 733, 724, 734 for CVC ONLY**  
**723, 733, 823, 824, 834 for BHC ONLY**

Prerequisite: Completion of two courses in the student's major or instructor or coordinator approval. These courses consist of seminars and on-the-job experience. Theory and instruction received in the courses of the students' major curricula are applied to the job. Students are placed in work-study positions in their technical occupational fields. Their skills and abilities to function successfully in their respective occupations are tested. These work internship courses are guided by learning objectives composed at the beginning of each semester by the students, their instructors or coordinators, and their supervisors at work. The instructors determine if the learning objectives are valid and give approval for credit.

**DANCE (DAN) 116 (1)**  
REHEARSAL AND PERFORMANCE (4 LAB.)

This course supplements beginning dance techniques classes. Basic concepts of approaching work on the concert stage - stage directions, stage areas, and the craft involved in rehearsing and performing are emphasized. This course may be repeated for credit.

**DANCE (DAN) 150 (3)**  
BEGINNING BALLET I (1 LEC., 3 LAB.)

This course explores basic ballet techniques. Included are posture, balance, coordination, rhythm, and flow of physical energy through the art form. Theory, terminology, ballet history, and current attitudes and events in ballet are also studied. Barre exercises and centre floor combinations are given. Laboratory fee.

**DANCE (DAN) 151 (3)**

BEGINNING BALLET II (1 LEC., 3 LAB.)

Prerequisite: Dance 150. This course is a continuation of Dance 150. Emphasis is on expansion of combinations at the barre. Connecting steps learned at centre are added. Jumps and pirouettes are introduced. Laboratory fee.

**DANCE (DAN) 155 (1)**

JAZZ I (3 LAB.)

The basic skills of jazz dance are introduced. Emphasis is on technique and development, rhythm awareness, jazz styles, and rhythmic combinations of movement. Laboratory fee.

**DANCE (DAN) 156 (1)**

JAZZ II (3 LAB.)

Prerequisite: Dance 155 or the consent of the instructor. Work on skills and style in jazz dance is continued. Technical skills, combinations of steps and skills into dance patterns, and exploration of composition in jazz form are emphasized. Laboratory fee.

**DANCE (DAN) 160 (3)**

INTRODUCTION TO DANCE HISTORY (3 LEC.)

A history of dance forms is presented. Primitive, classical, and contemporary forms are included.

**DANCE (DAN) 250 (3)**

INTERMEDIATE BALLET I (1 LEC., 3 LAB.)

Prerequisite: Dance 151. The development of ballet technique is continued. More complicated exercises at the barre and centre floor are included. Emphasis is on long series of movements, adagio and jumps. Precision of movement is stressed. Laboratory fee.

**DANCE (DAN) 251 (3)**

INTERMEDIATE BALLET II (1 LEC., 3 LAB.)

Prerequisite: Dance 250. This course begins pointe work for women. Specialized beats and tours are begun for men. Individual proficiency and technical virtuosity are developed. Laboratory fee.

**DANCE (DAN) 252 (1)**

COACHING AND REPERTOIRE (2 LAB.)

Prerequisite: Demonstrated ability in at least one technique and the consent of the instructor. This course is designed to give the dancer individual coaching in one or more dance techniques with special attention to the correction of individual problems. This course may be repeated for credit. Laboratory fee.

**DATA PROCESSING (DP) 129 (4)**

DATA ENTRY CONCEPTS (2 LEC., 5 LAB.)

Prerequisite: Office Careers 172 or one year of typing in high school or equivalent. This course provides skills using buffered display equipment.

Emphasis is on speed and accuracy. Topics include performing the basic functions record formatting with protected and variable fields, and using a variety of source documents. Program control, multiple programs, and program chaining are also covered. Laboratory fee.

**DATA PROCESSING (DP) 133 (4)**

BEGINNING PROGRAMMING (3 LEC., 4 LAB.)

Prerequisites: Computing Science 175 or the consent of the instructor. Concurrent enrollment in Data Processing 138 is advised. This course introduces programming skills using the COBOL language. Skills in problem analysis, flowcharting, coding, testing, and documentation are developed. Laboratory fee.

**DATA PROCESSING (DP) 136 (4)**

INTERMEDIATE PROGRAMMING (3 LEC., 4 LAB.)

Prerequisites: Data Processing 133 and Data Processing 138 or the consent of the instructor. Study of COBOL language continues. Included are levels of totals, group printing concepts, table build and search techniques, ISAM disk concepts, matching record, and file maintenance concepts using disk. Laboratory fee.

**DATA PROCESSING (DP) 137 (3)**

DATA PROCESSING MATHEMATICS (3 LEC.)

Prerequisites: One year of high school algebra or Developmental Math 091 or the consent of the instructor. This course introduces the principles of computer computation. Topics include the number system, fundamental processes, number bases, and the application of mathematics to typical business problems and procedures.

**DATA PROCESSING (DP) 138 (3)**

SYSTEMS ANALYSIS AND DATA PROCESSING LOGIC (3 LEC.)

Prerequisite: Computing Science 175 or the consent of the instructor. Concurrent enrollment in Data Processing 133 is advised. This course presents basic logic needed for problem solving with the computer. Topics include flowcharting standards, techniques for basic logic operations, table search and build techniques, types of report printing, conditional tests, multiple record types, and sequential file maintenance. System flowcharting is introduced.

**DATA PROCESSING (DP) 139 (3)**

TECHNICIAN (2 LEC., 4 LAB.)

Prerequisite: Credit or concurrent enrollment in Computing Science 175 or the consent of the instructor. The interrelationships among computer

systems, hardware, software, and personnel are covered. The role of personnel in computer operations, data entry, scheduling, data control, and librarian functions is included. Other topics include the importance of job documentations, standards manuals, and error logs. The relationship between operating procedures and the operating system is described. Job control language and system

**DATA PROCESSING (DP) 142 (3)**

RPG PROGRAMMING (2 LEC., 2 LAB.)

Prerequisite: Data Processing 133 or the consent of the instructor. This course introduces programming skills using the RPG II language. Emphasis is on language techniques and not on operation and functioning of the equipment. Programming problems emphasize card images and disk processing, and will include basic listings with levels of totals, multicard records, exception reporting, look ahead feature, and multifile processing. Laboratory fee.

**DATA PROCESSING (DP) 231 (4)**

ADVANCED PROGRAMMING (3 LEC., 4 LAB.)

Prerequisite: Data Processing 136 or the consent of the instructor. This course focuses on basic concepts and instructions in the IBM 360/370 Assembler language, using the standard instruction set emphasizing the decimal features, with a brief introduction to fixed point operations using registers. Selected macro instructions, table handling, editing printed output, and reading memory dumps are included. Laboratory fee.

**DATA PROCESSING (DP) 232 (4)**

APPLIED SYSTEMS (3 LEC., 4 LAB.)

Prerequisite: Data Processing 136 or the consent of the instructor. This course introduces and develops skills to analyze existing systems and to design new systems. Emphasis is on a case study involving all facets of system design from the original source of data to final reports. Flowcharts and documentation are included.

**DATA PROCESSING (DP) 233 (4)**

OPERATING SYSTEMS AND COMMUNICATIONS (3 LEC., 4 LAB.)

Prerequisite: Data Processing 133 or the consent of the instructor. Concepts and technical knowledge of an operating system, JCL, and utilities are presented. The internal functions of an operating system are analyzed.

**DATA PROCESSING (DP) 234 (4)**  
ADVANCED ASSEMBLY LANGUAGE CODING  
(3 LEC., 3 LAB.)

Prerequisite: Data Processing 231.  
The development of programming skills using the assembly language instruction set is covered. Topics include indexing, indexed sequential file organization, table search methods, data and bit manipulation techniques, code translation, advanced problem analysis, and debugging techniques. Floating point operations are introduced. Laboratory fee.

**DATA PROCESSING (DP) 236 (4)**  
ADVANCED COBOL TECHNIQUES (3 LEC., 4 LAB.)

Prerequisites: Data Processing 133 and Data Processing 136 or the consent of the instructor. This course provides advanced programming techniques using structured programming with the COBOL language. Random and sequential updating of disk files, table handling, report writer, the internal sort verb, and calling and copying techniques are emphasized. Laboratory fee.

**DATA PROCESSING (DP) 240 (4)**  
TELECOMMUNICATIONS I (3 LEC., 4 LAB.)

Prerequisite: A minimum of two semesters of a high level language and credit in Data Processing 138 or the consent of the instructor. Telecommunications concepts are introduced. Topics include configuration of a teleprocessing network on a third generation computer, vocabulary, modems, terminal configuration, polling simulation, and common carrier characteristics. An existing telecommunications system and a student conceived national data system are investigated, analyzed, and designed. Laboratory fee.

**DATA PROCESSING (DP) 241 (4)**  
TELECOMMUNICATIONS II (3 LEC., 3 LAB.)

Prerequisite: Data Processing 240 or the consent of the instructor. This course is a continuation of Data Processing 240. Topics include basic telecommunications programming, terminal configurations, line configurations, synchronous transmission, asynchronous transmission, and polling techniques at the central unit. Laboratory fee.

**DATA PROCESSING (DP) 244 (3)**  
BASIC PROGRAMMING (2 LEC., 2 LAB.)

Prerequisite: Computing Science 175 or the consent of the instructor. This course covers the fundamentals of the BASIC programming language. Students gain proficiency by writing and debugging programs using interactive microcomputers. Laboratory fee.

**DATA PROCESSING (DP) 246 (4)**  
DATA BASE SYSTEMS (3 LEC., 4 LAB.)

Prerequisites: Data Processing 136 or the consent of the instructor. This course is an introduction to applications program development in database environment with emphasis on loading, modifying, and querying a database using a higher-level language. Discussion and application of data structures; indexed and direct file organizations; storage devices, data analysis, design, and implementation; and data administration are included. Laboratory fee.

**DEVELOPMENTAL COMMUNICATIONS (DC) 095 (3)**  
COMMUNICATION SKILLS (3 LEC.)

This course focuses on strengthening language communications. Topics include grammar, paragraph structure, reading skills, and oral communication. Emphasis is on individual testing and needs.

**DEVELOPMENTAL COMMUNICATIONS (DC) 120 (3)**  
COMMUNICATION SKILLS (2 LEC., 2 LAB.)

This course is for students with significant communication problems. It is organized around skill development, and students may enroll at any time (not just at the beginning of a semester) upon the referral of an instructor. Emphasis is on individual needs and personalized programs. Special attention is given to oral language. Contacts are made with other departments to provide other ways of learning for the students.

**DEVELOPMENTAL LEARNING (DL) 094 (1)**  
LEARNING SKILLS IMPROVEMENT (2 LAB.)

Learning skills are strengthened. Emphasis is on individual needs and personalized programs. This course may be repeated for a maximum of three credits.

**DEVELOPMENTAL MATHEMATICS**

Developmental Mathematics Courses offer a review of mathematics skills. Developmental Mathematics 093 satisfies prerequisites for Mathematics 101, 104, 111, and 115. Developmental Mathematics 091 satisfies prerequisites for Mathematics 130, 139, and 195.

**DEVELOPMENTAL MATHEMATICS (DM) 060 (1)**

BASIC MATHEMATICS I (1 LEC.)

This course is designed to give an understanding of fundamental operations. Selected topics include whole numbers, decimals, and ratio and proportions.

**DEVELOPMENTAL MATHEMATICS (DM) 061 (1)**

BASIC MATHEMATICS II (1 LEC.)

This course is designed to give an understanding of fractions. Selected topics include primes, factors, least common multiples, percent, and basic operations with fractions.

**DEVELOPMENTAL MATHEMATICS (DM) 063 (1)**

PRE ALGEBRA (1 LEC.)

This course is designed to introduce students to the language of algebra with such topics as integers, metrics, equations, and properties of counting numbers.

**DEVELOPMENTAL MATHEMATICS (DM) 070 (1)**

ELEMENTARY ALGEBRA I (1 LEC.)

Prerequisites: Developmental Mathematics 090, 063 or equivalent. This course is an introduction to algebra and includes selected topics such as basic principles and operations of sets, counting numbers and integers.

**DEVELOPMENTAL MATHEMATICS (DM) 071 (1)**

ELEMENTARY ALGEBRA II (1 LEC.)

Prerequisite: Developmental Mathematics 070 or equivalent. This course includes selected topics such as rational numbers, algebraic polynomials, factoring, and algebraic fractions.

**DEVELOPMENTAL MATHEMATICS (DM) 072 (1)**

ELEMENTARY ALGEBRA III (1 LEC.)

Prerequisite: Developmental Mathematics 071 or equivalent. This course includes selected topics such as fractional and quadratic equations, quadratic equations with irrational solutions, and systems of equations involving two variables.

**DEVELOPMENTAL MATHEMATICS (DM) 080 (1)**

INTERMEDIATE ALGEBRA I (1 LEC.)

Prerequisites: Developmental Mathematics 072, 091 or equivalent. This course includes selected topics such as systems of rational numbers, real numbers, and complex numbers.

**DEVELOPMENTAL MATHEMATICS (DM) 081 (1)**

INTERMEDIATE ALGEBRA II (1 LEC.)

Prerequisite: Developmental Mathematics 080 or equivalent. This course includes selected topics such as sets, relations, functions, inequalities, and absolute values.

**DEVELOPMENTAL MATHEMATICS  
(DM) 082 (1)**

INTERMEDIATE ALGEBRA III (1 LEC.)

Prerequisite: Developmental Mathematics 081 or equivalent. This course includes selected topics such as graphing, exponents, and factoring.

**DEVELOPMENTAL MATHEMATICS  
(DM) 090 (3)**

PRE ALGEBRA MATHEMATICS (3 LEC.)

This course is designed to develop an understanding of addition, subtraction, multiplication, and division of whole numbers, fractions, decimals and percentages and to strengthen basic skills in mathematics. It is the most basic mathematics course and includes an introduction to algebra.

**DEVELOPMENTAL MATHEMATICS  
(DM) 091 (3)**

ELEMENTARY ALGEBRA (3 LEC.)

Prerequisite: Developmental Mathematics 090. This course is comparable to the first-year algebra course in high school. It includes special products and factoring, fractions, equations, graphs, functions, and an introduction to geometry.

**DEVELOPMENTAL MATHEMATICS  
(DM) 093 (3)**

INTERMEDIATE ALGEBRA (3 LEC.)

Prerequisite: One year of high school algebra or Developmental Mathematics 091. This course is comparable to the second-year algebra course in high school. It includes terminology of sets, properties of real numbers, fundamental operations of polynomials and fractions, products, factoring, radicals, and rational exponents. Also covered are solutions of linear, fractional, quadratic and systems of linear equations, and graphing.

**DEVELOPMENTAL READING**

Students can improve their performance in English courses by enrolling in Developmental Reading Courses. Developmental Reading 090 and 091 are valuable skill development courses for English 101. Reading 101 is especially helpful in English 102 and the sophomore-level literature courses. See the catalog descriptions in reading for full course content.

**DEVELOPMENTAL READING  
(DR) 090 (3)**TECHNIQUES OF  
READING/LEARNING (3 LEC.)

Comprehension, vocabulary development, and study skills are the focus of this course. Emphasis is on learning how to learn. Included are reading and learning experiences to strengthen the total educational background of each student. Meeting individual needs is stressed.

**DEVELOPMENTAL READING  
(DR) 091 (3)**TECHNIQUES OF READING AND  
LEARNING (3 LEC.)

This course is a continuation of developmental reading 090. Meeting individual needs is stressed.

**DEVELOPMENTAL WRITING**

Students can improve their writing skills by taking Developmental Writing. These courses are offered for one to three hours of credit. Emphasis is on organization skills and research paper styles, and individual writing weaknesses.

**DEVELOPMENTAL WRITING  
(DW) 090 (3)**

WRITING (3 LEC.)

Basic writing skills are developed. Topics include spelling, grammar, and vocabulary improvement. Principles of sentence and paragraph structure are also included. Organization and composition are covered. Emphasis is on individual needs and strengthening the student's skills.

**DEVELOPMENTAL WRITING  
(DW) 091 (3)**

WRITING (3 LEC.)

This course is a sequel to Writing 090. It focuses on composition. Included are skills of organization, transition, and revision. Emphasis is on individual needs and personalized assignments. Brief, simple forms as well as more complex critical and research writing may be included.

**DEVELOPMENTAL WRITING  
(DW) 092 (1)**

WRITING LAB (3 LAB.)

This course is a writing workshop. Students are given instruction and supervision in written assignments. The research paper and editing are both included.

**DRAFTING (DFT) 135 (2)**REPRODUCTION PROCESSES (1 LEC., 3 LAB.)  
(64 CONTACT HOURS)

Equipment and processes used to reproduce technical art are studied. Included are the graphic arts process camera, lithographic offset printing, diazo reproduction, blueprinting, photodrafting, microfilming, photocopying, silk screen printing, printed circuit board etching, thermography, typographics, Xerography, engravings, and others. The rapidly expanding field of computergraphics is also covered. Lab work includes the preparation of flats for offset printing of brochures. Laboratory fee.

**DRAFTING (DFT) 136 (3)**GEOLOGICAL AND LAND  
DRAFTING (2 LEC., 4 LAB.) (96 CONTACT  
HOURS)

Prerequisites: Drafting 183 or the equivalent and Mathematics 196. Equivalent is based on high school drafting courses or on student's work experience. Sample of drawings and/or high school transcript must be presented. This is a specialty course to prepare one to work in civil drafting. Various drawings are completed, such as relief maps, plan and profile drawings, roadways, pipelines, and petroleum and geophysical maps. Calculations are made from surveyor's notes to plot a traverse and contour lines and to determine area and volumes. A set of drawings is prepared for a residential subdivision, a shopping center, or some other type of land development.

**DRAFTING (DFT) 160 (2)**MANUFACTURING  
FUNDAMENTALS (2 LEC.)

Manufacturing fundamentals and production methods are studied. Modern fabrication techniques and equipment used in industry are presented. The functions and role of drafting are described. ECC ONLY.

**DRAFTING (DFT) 182 (2)**TECHNICIAN DRAFTING (1 LEC., 3 LAB.) (64  
CONTACT HOURS)

This course focuses on the reading and interpretation of engineering drawings. Topics include multiview drawings, pictorial drawings, dimensioning, measurement with scales, schematic diagrams, and printed circuit boards. Laboratory fee.

**DRAFTING (DFT) 183 (4)**BASIC DRAFTING (2 LEC., 6 LAB.) (128  
CONTACT HOURS)

This course is for students who have had little or no previous experience in drafting. Skill in orthographic, axonometric, and oblique sketching and drawing is developed. Topics include lettering, applied geometry, fasteners, sectioning, tolerancing, and auxiliaries. Experience is provided in using handbooks and other resource materials and in developing design skills. U.S.A.S.I., government, and industrial standards are used. Emphasis is on both mechanical skills and graphic theory. Laboratory fee.

**DRAFTING (DFT) 184 (3)**INTERMEDIATE DRAFTING (2 LEC., 4 LAB.) (96  
CONTACT HOURS)

Prerequisite: Drafting 183 or the equivalent. Equivalent is based on high school drafting courses or on student's work experience. Sample of drawings and/or high school transcript must be presented. Drafting problems, design function, and specialized drafting areas are examined. Included are the detailing and assembling of machine

parts, gears, cams, jigs, fixtures, metals, and metal forming processes. Drawing room standards and reproducing drawings are studied. Detail and assembly drawings are made. Laboratory fee.

**DRAFTING (DFT) 185 (4)**  
ARCHITECTURAL DRAFTING (2 LEC., 6 LAB.)  
(128 CONTACT HOURS)

This course begins with architectural lettering, and drafting of construction details. Emphasis is on technique and use of appropriate material symbols and conventions. Working drawings are prepared, including plans, elevations, sections, and details. Drawings for buildings using steel, concrete, and timber structural components are covered. Reference materials are used to provide skills in locating data and in using handbooks.

**DRAFTING (DFT) 230 (3)**  
STRUCTURAL DRAFTING (2 LEC., 4 LAB.) (96 CONTACT HOURS)

Prerequisites: Drafting 184 and Mathematics 196. Stresses and thermal and elastic qualities of various materials are studied. Beams, columns, and other materials are included. Structural plans, details, and shop drawings of components are developed for buildings using steel, reinforced concrete, and timber structures. Emphasis is on drafting appropriate drawings for fabrication and erection of structural components.

**DRAFTING (DFT) 231 (3)**  
ELECTRONIC DRAFTING (2 LEC., 4 LAB.) (96 CONTACT HOURS)

Prerequisite: Drafting 183. This course focuses on drawings used in the electronics industry. Topics include block and logic diagrams, schematic diagrams, interconnecting wiring diagrams, printed circuit boards, integrated circuits, component packaging, chassis design and current practices.

**DRAFTING (DFT) 232 (3)**  
TECHNICAL ILLUSTRATION (2 LEC., 4 LAB.) (96 CONTACT HOURS)

Prerequisite: Drafting 183. The rendering of three-dimensional drawings is covered. Orthographic views and engineer's sketches are developed into isometric, dimetric, perspective, and diagrammatic drawings of equipment and their environments. Technical sketching, and hand mechanical lettering, air brush retouching of photographs, handling of commercially prepared pressure sensitive materials, and layout of schematics, charts, and graphs are practiced. Laboratory fee.

**DRAFTING (DFT) 233 (4)**  
MACHINE DESIGN (2 LEC., 6 LAB.) (128 CONTACT HOURS)

Prerequisites: Drafting 184, Physics 131, and credit or concurrent enrollment in Engineering 186 and Mathematics 196. The principles of physics, statics, strength of materials, and physical properties of materials are applied to the design of machine elements. Topics include function, environment, production, problems, and cost. Emphasis is on the practical application of design principles in graphic form.

**DRAFTING (DFT) 234 (4)**  
ADVANCED TECHNICAL ILLUSTRATION (2 LEC., 6 LAB.) (128 CONTACT HOURS)

Prerequisite: Drafting 232. An area of specialization is chosen and pursued in depth. Examples are pictorials for color separation printing, air brush renderings, letterforms for logos and hand lettering, complex exploded views in isometric, perspective renderings, design of commercial displays and art for slide presentations. Laboratory fee.

**DRAFTING (DFT) 235 (3)**  
BUILDING EQUIPMENT (MECHANICAL AND ELECTRICAL) (2 LEC., 4 LAB.) (96 CONTACT HOURS)

Prerequisite: Drafting 183 or Drafting 185. Plans and details for mechanical equipment are drawn. Equipment includes air conditioning, plumbing, and electrical systems. Emphasis is on the use of appropriate symbols and conventions. Mechanical and electrical features are coordinated with structural and architectural components. Laboratory fee.

**DRAFTING (DFT) 236 (3)**  
PIPING AND PRESSURE VESSEL DESIGN (2 LEC., 4 LAB.) (96 CONTACT HOURS)

Prerequisites: Drafting 183 and Mathematics 195 or the equivalent. This course presents the methods of piping of fluids for refineries, petrochemical plants, and industrial facilities. ASME codes are applied to the design of pressure vessels, pipefitting, welded and seamless piping, pumps, and heat exchanges. Drawing techniques are emphasized in orthographic and isometric projections. Laboratory fee.

**DRAFTING (DFT) 245 (3)**  
COMPUTER AIDED DESIGN (2 LEC., 4 LAB.)  
Prerequisites: Drafting 183 or Engineering 105. Capabilities and limitations of the electronic computer as an aid to the designer are studied. Drafting procedures using an interactive system with computer graphics are practiced. Forms and uses of computer aided products are viewed in perspective with the overall design process. Laboratory fee.

**DRAFTING (DFT) 246 (3)**  
ADVANCED CAD - ELECTRONIC (2 LEC., 4 LAB.)

Prerequisite: Drafting 245. Advanced uses of the electronic computer as an aid to the designer are studied. Special emphasis is given to printed circuit board and integrated circuit design. Menu and library construction will be practiced while using the interactive graphic system. Laboratory fee.

**DRAFTING (DFT) 248 (3)**  
ADVANCED CAD - MECHANICAL (2 LEC., 4 LAB.)

Prerequisite: Drafting 245. Advanced uses of the electronic computer as an aid to the designer are studied. Special emphasis is given to three-dimensional design, specifically mechanical. Menu and library construction will be practiced while using the interactive graphic system. Laboratory fee.

**DRAFTING (DFT) 250 (3)**  
SHEET METAL DESIGN (2 LEC., 4 LAB.)

Prerequisite: Drafting 183. This course includes the preparation of drawings for sheet metal developments. Topics include bend allowance, relief, standard bends for specific applications, cost factors to consider in manufacturing, metal specifications, finishing, coating, fasteners, and weldments. Laboratory fee. EFC ONLY

**DRAFTING (DFT) 251 (3)**  
INDUSTRIAL DESIGN (2 LEC., 4 LAB.)

Prerequisite: Drafting 250. This course includes the design of metal and plastic packages for electronic, optical, and mechanical components. Topics include standard boxes, panels, mounts, brackets, fasteners, grommets, and other standard parts used in the design of packages. Standard catalogs and manuals are used to design packages for specific situations. Laboratory fee. EFC ONLY

**DRAFTING (DFT) COOPERATIVE WORK EXPERIENCE**

701, 711, 801, 811 (1)  
702, 712, 802, 812 (2)  
703, 713, 803, 813 (3)  
704, 714, 804, 814 (4)

**ECOLOGY (ECY) 291 (3)**  
PEOPLE AND THEIR ENVIRONMENT II (3 LEC.)

Environmental awareness and knowledge are emphasized. Topics include pollution, erosion, land use, energy resource depletion, overpopulation, and the effects of unguided technological development. Proper planning of societal and individual action in order to protect the natural environment is stressed. (This course may be offered via television.)



**ECONOMICS (ECO) 201 (3)**  
PRINCIPLES OF ECONOMICS I (3 LEC.)

Sophomore standing is recommended. The principles of macroeconomics are presented. Topics include economic organization, national income determination, money and banking, monetary and fiscal policy, economic fluctuations, and growth. (This course is offered on campus and may be offered via television.)

**ECONOMICS (ECO) 202 (3)**  
PRINCIPLES OF ECONOMICS II (3 LEC.)

Prerequisite: Economics 201 or the consent of the instructor. The principles of microeconomics are presented. Topics include the theory of demand, supply, and price of factors. Income distribution and theory of the firm are also included. Emphasis is on international economics and contemporary economic problems.

**ELECTRONICS TECHNOLOGY (ET) 135 (6)**

DC-AC THEORY AND CIRCUIT ANALYSIS (5 LEC., 3 LAB.)

Prerequisites: Credit or concurrent enrollment in Mathematics 195 or the equivalent. This is an accelerated course combining DC circuits (ET 190) and AC circuits (ET 191) in one semester for students with previous electronics experience or a good mathematics background. Topics include the analysis of resistive, capacitive, inductive, and combination circuits. Magnetism, resonance, schematic symbols, and sine wave analysis are also included. Series, parallel, and series-parallel circuits are covered. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 190 (4)**

DC CIRCUITS AND ELECTRICAL MEASUREMENTS (3 LEC., 3 LAB.)

Prerequisite: Mathematics 195 or the equivalent recommended. The mathematical theory of direct current circuits is presented in combination with laboratory fundamentals. Emphasis is on elementary principles of magnetism, electric concepts and units, diagrams, and resistance. Electromagnetism, series and parallel circuits, simple meter circuits, conductors, and insulators are also stressed. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 191 (4)**

AC CIRCUITS (3 LEC., 3 LAB.) (96 CONTACT HOURS)

Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Mathematics 195 or the equivalent. This course covers the fundamental theories of alternating current. The theories are applied in various circuits. Included are laboratory experiments on power

factor, sine wave analysis, resonant circuits, capacitance, inductance, Q of coils, magnetism, and resistance. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 193 (4)**

ACTIVE DEVICES (3 LEC., 3 LAB.)

Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Electronics Technology 191. Semiconductors (active devices) are the focus of this course. Topics include composition, parameters, linear and non-linear characteristics, in circuit action, amplifiers, rectifiers, and switching. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 194 (3)**

INSTRUMENTATION (2 LEC., 3 LAB.)

Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Electronics Technology 191 and 193. Electrical devices for measurement and instrumentation are studied and applied to work situations. Included are basic AC and DC measurement meters, impedance bridges, oscilloscopes, signal generators, signal-tracers, and tube and transistor testers. The course concludes with a study of audio frequency test methods and equipment. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 231 (4)**

SPECIAL CIRCUITS WITH COMMUNICATIONS APPLICATIONS (3 LEC., 3 LAB.)

Prerequisites: Electronics Technology 193 and 194. Active devices are applied to circuitry common to most communications equipment. Both the theory of operation and practical applications of the circuits in laboratory experiments are included. Circuits including power supplies, voltage regulators, tuned and untuned amplifiers, filters, oscillators, modulators and detectors, with application to various types of intelligence transmission and reception are emphasized in the course. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 232 (4)**

ANALYSIS OF ELECTRONICS LOGIC AND SWITCHING CIRCUITS (3 LEC., 3 LAB.)

Prerequisites: Electronics Technology 193 and 194. The course presents circuitry common to electronic control systems and automatic measuring systems. Typical circuit functions covered include clamping, gating, switching, and counting. Circuits include voltage discriminators, multivibrators, dividers, counters, and gating circuits. Boolean algebra and binary numbers are reviewed. Emphasis is on semiconductor devices. Fluidic switching devices are introduced. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 234 (3)**

ELECTRONIC CIRCUITS AND SYSTEMS (6 LAB.)

Prerequisites: Completion of all Electronics Technology Courses up to and including Electronics Technology 231; and may take Electronics Technology 232 and Electronics Technology 231 concurrently with Electronics Technology 234. The design, layout construction, and calibration of an electronics project are covered. Students develop independent project and prepare term papers on functions of components, operating specifications, and schematics. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 235 (4)**

FUNDAMENTALS OF ELECTRICITY (3 LEC., 3 LAB.)

This course is an introduction to electricity for students in related programs. Topics include basic AC and DC theory, voltage, current, and resistance, and electrical wiring principles and schematics. Transformers, relays, timers, electrical measuring devices, and basic electrical calculations are also included. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 237 (4)**

MODULAR MEMORIES AND MICROPROCESSORS (3 LEC., 3 LAB.)

Prerequisites: Electronics Technology 232. Read only memories (ROM's), random access memories (RAM's), and microprocessors are presented. Emphasis is on specifications, applications, and operation. Control buses data bus, addressing, coding, and programming of typical microprocessor units are included. Microprocessor system is constructed, tested, coded, and programmed. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 238 (4)**

LINEAR INTEGRATED CIRCUITS (3 LEC., 3 LAB.)

Prerequisites: Electronics Technology 190, 191, and 193. Differential amplifiers, operational amplifiers, and integrated circuit timers are investigated. Topics include comparators, detectors, inverting and non-inverting amplifiers, OP AMP adders, differentiating and integrating amplifiers, and instrumentation amplifiers. Digital to analog converters, analog to digital converters, special OP AMP applications, and integrated circuits timers are also included. Limitations and specifications of integrated circuits are covered. Laboratory fee.



**ELECTRONICS TECHNOLOGY (ET) 239 (3)**

MICROWAVE TECHNOLOGY (3 LEC.)

Prerequisites: Electronics Technology 194 and Electronics Technology 231. Microwave concepts such as propagation, transmission lines including waveguides, standing waves, impedance matching, basic antennas and various basic microwave measurements are covered. Microwave measurement techniques such as power and frequency meter measurements and calibration, VSWR determinations, klystron characteristics, and waveguide tuning will be demonstrated. A basic radar system is discussed as time permits.

**ELECTRONICS TECHNOLOGY (ET) 240 (4)**

ELECTRONICS THEORY AND APPLICATION OF DIGITAL COMPUTERS (3 LEC., 3 LAB.)

Prerequisites: Mathematics 196 and Electronics Technology 193. The course presents the electronic switching circuits for digital computer systems. Logic symbology, gates, and related Boolean algebra are covered. Computer terminology and number systems are included. An introduction to BASIC language programming for electronic circuit analysis is also included. Laboratory experiments in addition to computer programming include basic logic gate analysis and test procedures. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) COOPERATIVE WORK EXPERIENCE**

**701, 711, 801, 811 (1)**

**702, 712, 802, 812 (2)**

**703, 713, 803, 813 (3)**

**704, 714, 804, 814 (4)**

**ENGINEERING (EGR) 106 (3)**

DESCRIPTIVE GEOMETRY (2 LEC., 4 LAB.)

Prerequisite: Drafting 183 or Engineering 105. This course provides training in the visualization of three-dimensional structures. Emphasis is on accurately representing these structures in drawings by analyzing the true relationship between points, lines, and planes. Included are the generation and classification of lines, surfaces, intersections, developments, auxiliaries, and revolutions. Laboratory fee.

**ENGINEERING (EGR) 186 (2)**

MANUFACTURING PROCESSES (1 LEC., 2 LAB.) (48 CONTACT HOURS)

This course introduces the student enrolled in technical programs to the many steps involved in manufacturing a product. This is accomplished by involving the class in producing a device with precision. The student gains practical experience with working drawings, a variety of machine tools and the assembly of components.

The student is made aware of the factors involved in selecting materials and economical utilization of materials. Laboratory fee.

**ENGINEERING (EGR) 188 (3)**

STATICS (3 LEC.) (48 CONTACT HOURS)

Prerequisite: Credit or concurrent enrollment in Mathematics 196. This course is a study of force and force systems, resultants, friction, centroids, conditions of equilibrium, analysis of trusses, and frame structures. Both numerical and graphical methods are used.

**ENGINEERING (EGR) 189 (3)**

CHARACTERISTICS AND STRENGTHS OF MATERIALS (3 LEC.) (48 CONTACT HOURS)

Prerequisites: Engineering 188. The characteristics and strengths of materials are examined. Emphasis is on loads, stresses, and deformations within the elastic range.

**ENGLISH**

(Also see Developmental Reading and Developmental Writing.) Additional instruction in writing and reading is available through the Learning Skills Center.

**ENGLISH IN THE SOPHOMORE YEAR**

English 201, 202, 203, 204, 205, 206, 215 and 216 are independent units of three credit hours each, from which any combination of two will be selected to satisfy degree requirements in sophomore English. Student should consult catalog of the senior college he expects to attend for requirements in his major before choosing English courses.

**ENGLISH (ENG) 101 (3)**

COMPOSITION AND EXPOSITORY READING (3 LEC.)

The development of skills is the focus of this course. Skills in writing and in the critical analysis of prose are included. (This course is offered on campus and may be offered via television.)

**ENGLISH (ENG) 102 (3)**

COMPOSITION AND LITERATURE (3 LEC.)

Prerequisite: English 101. This course continues the development of skills in writing. Emphasis is on analysis of literary readings, expository writing, and investigative methods of research. (This course is offered on campus and may be offered via television.)

**ENGLISH (ENG) 201 (3)**

BRITISH LITERATURE (3 LEC.)

Prerequisite: English 102. Significant works of British literature are studied. The Old English Period through the 18th century is covered.

**ENGLISH (ENG) 202 (3)**

BRITISH LITERATURE (3 LEC.)

Prerequisite: English 102. Significant works of British literature are studied. The Romantic Period to the present is covered.

**ENGLISH (ENG) 203 (3)**

WORLD LITERATURE (3 LEC.)

Prerequisite: English 102. Significant works of continental Europe are studied. The Greek Classical Period through the Renaissance is covered.

**ENGLISH (ENG) 204 (3)**

WORLD LITERATURE (3 LEC.)

Prerequisite: English 102. Significant works of continental Europe, England, and America are studied. The time period since the Renaissance is covered.

**ENGLISH (ENG) 205 (3)**

AMERICAN LITERATURE (3 LEC.)

Prerequisite: English 102. Significant works of American writers before Walt Whitman are studied. Emphasis is on the context of the writers' times.

**ENGLISH (ENG) 206 (3)**

AMERICAN LITERATURE (3 LEC.)

Prerequisite: English 102. Significant works of American writers from Walt Whitman to the present are studied.

**ENGLISH (ENG) 209 (3)**

CREATIVE WRITING (3 LEC.)

Prerequisite: English 102. The writing of fiction is the focus of this course. Included are the short story, poetry, and short drama.

**ENGLISH (ENG) 210 (3)**

TECHNICAL WRITING (3 LEC.)

Prerequisite: English 101 and 102 or Communications 131 and 132. The technical style of writing is introduced. Emphasis is on the writing of technical papers, reports, proposals, progress reports, and descriptions.

**ENGLISH (ENG) 215 (3)**

STUDIES IN LITERATURE (3 LEC.)

Prerequisite: English 102. Selections in literature are read, analyzed, and discussed. Selections are organized by genre, period, or geographical region. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit.

**ENGLISH (ENG) 216 (3)**

STUDIES IN LITERATURE (3 LEC.)

Prerequisite: English 102. Selections in literature are read, analyzed, and discussed. Selections are organized by theme, interdisciplinary content or major author. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit.

**FRENCH (FR) 101 (4)**  
BEGINNING FRENCH (3 LEC., 2 LAB.)

The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee.

**FRENCH (FR) 102 (4)**  
BEGINNING FRENCH (3 LEC., 2 LAB.)

Prerequisite: French 101 or the equivalent. This course is a continuation of French 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee.

**FRENCH (FR) 201 (3)**  
INTERMEDIATE FRENCH (3 LEC.)

Prerequisite: French 102 or the equivalent. Reading, composition, and intense oral practice are covered in this course. Grammar is reviewed.

**FRENCH (FR) 202 (3)**  
INTERMEDIATE FRENCH (3 LEC.)

Prerequisite: French 201 or the equivalent. This course is a continuation of French 201. Contemporary literature and composition are studied.

**FRENCH (FR) 203 (3)**  
INTRODUCTION TO FRENCH LITERATURE (3 LEC.)

Prerequisite: French 202 or the consent of the instructor. This course is an introduction to French literature. It includes readings in French literature, history, culture, art, and civilization.

**FRENCH (FR) 204 (3)**  
INTRODUCTION TO FRENCH LITERATURE (3 LEC.)

Prerequisite: French 202 or the consent of the instructor. This course is a continuation of French 203. It includes readings in French literature, history, culture, art, and civilization.

**GEOGRAPHY (GPY) 101 (3)**  
PHYSICAL GEOGRAPHY (3 LEC.)

The physical composition of the earth is surveyed. Topics include weather, climate, topography, plant and animal life, land, and the sea. Emphasis is on the earth in space, use of maps and charts, and place geography.

**GEOGRAPHY (GPY) 103 (3)**  
CULTURAL GEOGRAPHY (3 LEC.)

This course focuses on the development of regional variations of culture. Topics include the distribution of races, religions, and languages. Aspects of material culture are also included. Emphasis is on origins and diffusion.

**GEOLOGY (GEO) 101 (4)**  
PHYSICAL GEOLOGY (3 LEC., 3 LAB.)

This course is for science and non-science majors. It is a study of earth materials and processes. Included is

an introduction to geochemistry, geophysics, the earth's interior, and magnetism. The earth's setting in space, minerals, rocks, structures, and geologic processes are also included. Laboratory fee.

**GEOLOGY (GEO) 102 (4)**  
HISTORICAL GEOLOGY (3 LEC., 3 LAB.)

This course is for science and non-science majors. It is a study of earth materials and processes within a developmental time perspective. Fossils, geologic maps, and field studies are used to interpret geologic history. Laboratory fee.

**GEOLOGY (GEO) 103 (3)**  
INTRODUCTION TO OCEANOGRAPHY (2 LEC., 2 LAB.)

The physical and chemical characteristics of ocean water, its circulation, relationship with the atmosphere, and the effect on the adjacent land is investigated. The geological development of the ocean basins and the sediment in them is also considered. Laboratory fee.

**GEOLOGY (GEO) 205 (4)**  
FIELD GEOLOGY (3 LEC., 3 LAB.)

Prerequisites: Eight credit hours of geology or the consent of the instructor. Geological features, landforms, minerals, and fossils are surveyed. Map reading and interpretation are also included. Emphasis is on the identification, classification and collection of specimens in the field. This course may be repeated for credit.

**GERMAN (GER) 101 (4)**  
BEGINNING GERMAN (3 LEC., 2 LAB.)

The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee.

**GERMAN (GER) 102 (4)**  
BEGINNING GERMAN (3 LEC., 2 LAB.)

Prerequisite: German 101 or the equivalent. This course is a continuation of German 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee.

**GERMAN (GER) 201 (3)**  
INTERMEDIATE GERMAN (3 LEC.)

Prerequisite: German 102 or the equivalent or the consent of the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed.

**GERMAN (GER) 202 (3)**  
INTERMEDIATE GERMAN (3 LEC.)

Prerequisite: German 201 or the equivalent. This course is a continuation of German 201. Contemporary literature and composition are studied.

**GOVERNMENT (GVT) 201 (3)**  
AMERICAN GOVERNMENT (3 LEC.)

Prerequisite: Sophomore standing recommended. This course is an introduction to the study of political science. Topics include the origin and development of constitutional democracy (United States and Texas), federalism and intergovernmental relations, local government, parties, politics, and political behavior. The course satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.)

**GOVERNMENT (GVT) 202 (3)**  
AMERICAN GOVERNMENT (3 LEC.)

Prerequisite: Sophomore standing recommended. The three branches of the United States and Texas government are studied. Topics include the legislative process, the executive and bureaucratic structure, the judicial process, civil rights and liberties, and domestic policies. Other topics include foreign relations and national defense. This course satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.)

**GOVERNMENT (GVT) 205 (3)**  
STUDIES IN GOVERNMENT (3 LEC.)

Prerequisite: Sophomore standing and 6 hours of history or government. Selected topics in government are presented. The course may be repeated once for credit when different topics are presented.

**HISTORY (HST) 101 (3)**  
HISTORY OF THE UNITED STATES (3 LEC.)

The history of the United States is presented, beginning with the European background and first discoveries. The pattern of exploration, settlement, and development of institutions is followed throughout the colonial period and the early national experience to 1877. (This course is offered on campus and may be offered via television.)

**HISTORY (HST) 102 (3)**  
HISTORY OF THE UNITED STATES (3 LEC.)

The history of the United States is surveyed from the reconstruction era to the present day. The study includes social, economic, and political aspects of American life. The development of the United States as a world power is followed. (This course is offered on campus and may be offered via television.)

**HISTORY (HST) 105 (3)**

WESTERN CIVILIZATION (3 LEC.)

The civilization in the West from ancient time through the Enlightenment is surveyed. Topics include the Mediterranean world, including Greece and Rome, the Middle Ages, and the beginnings of modern history. Particular emphasis is on the Renaissance, Reformation, the rise of the national state, the development of parliamentary government, and the influences of European colonization.

**HISTORY (HST) 106 (3)**

WESTERN CIVILIZATION (3 LEC.)

This course is a continuation of History 105. It follows the development of civilization from the enlightenment to current times. Topics include the Age of Revolution, the beginning of industrialism, 19th century, and the social, economic, and political factors of recent world history.

**HISTORY (HST) 110 (3)**

THE HERITAGE OF MEXICO (3 LEC.)

This course (cross-listed as Anthropology 110) is taught in two parts each semester. The first part of the course deals with the archaeology of Mexico beginning with the first humans to enter the North American continent and culminating with the arrival of the Spanish in 1519 A.D. Emphasis is on archaic cultures, the Maya, the Toltec, and the Aztec empires. The second part of the course deals with Mexican history and modern relations between the United States and Mexico. The student may register for either History 110 or Anthropology 110, but may receive credit for only one of the two.

**HISTORY (HST) 112 (3)**

LATIN AMERICAN HISTORY (3 LEC.)

This course presents developments and personalities which have influenced Latin American history. Topics include Indian cultures, the Conquistadors, Spanish administration, the wars of independence, and relations with the United States. A brief survey of contemporary problems concludes the course.

**HISTORY (HST) 120 (3)**

AFRO-AMERICAN HISTORY (3 LEC.)

The role of the Black in American history is studied. The slave trade and slavery in the United States are reviewed. Contributions of black Americans in the U.S. are described. Emphasis is on the political, economic, and sociological factors of the 20th century.

**HISTORY (HST) 204 (3)**

AMERICAN MINORITIES (3 LEC.)

Prerequisites: Sociology 101 or 6 hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one of the two. The principal minority groups in American society are the focus of this course. The sociological significance and historic contributions of the groups are presented. Emphasis is on current problems of intergroup relations, social movements, and related social changes.

**HISTORY (HST) 205 (3)**

STUDIES IN U.S. HISTORY (3 LEC.)

Prerequisite: Sophomore standing and 6 hours of American history. Selected topics in the history of the United States are presented. The course may be repeated once for credit when different topics are presented.

**HOROLOGY (HOR) 139 (8)**

ANTIQUE CLOCK THEORY AND REPAIR (2 LEC., 23 LAB.) (275 CONTACT HOURS)

The history, design, and repair of clocks are covered. French, German, English, and Early American clocks are included, and both weight-driven and spring-driven clocks are studied. Types of clock movements to be reconditioned include grandfather, wall, shelf, and Westminster chime. Emphasis is on cleaning, rebushing plates, repivoting wheels, and adjusting chime and strike trains for count wheel and rack-and-snail types. The use and care of specialized hand tools and equipment are also covered. Laboratory fee.

**HOROLOGY (HOR) 140 (8)**

MODERN CLOCK THEORY AND REPAIR (2 LEC., 23 LAB.) (275 CONTACT HOURS)

This course presents design factors and repair techniques of American, German, and Swiss clocks. Included are clocks with weight, spring, motor, and battery power in the 1-day, 8-day, and 400-day, and continuous synchronous electric variations. Repair and adjustment of anniversary, cuckoo, travel, alarm, timers, electric, cordless, and atmos clocks are included. Laboratory fee.

**HOROLOGY (HOR) 141 (8)**

WATCH CLEANING AND ASSEMBLY (2 LEC., 23 LAB.) (275 CONTACT HOURS)

Hand cleaning and ultrasonic machine cleaning of watch movements are covered. Included are the removal of rust and scale, inspection, and lubrication of subassemblies. Pocket watches and gent's wrist and ladies' baguette sizes are included. Emphasis

is on the use and care of precision hand tools, personal work habits, and attitudes. The polishing case, crystal, and band is also stressed. Timing record analysis is introduced. Laboratory fee.

**HOROLOGY (HOR) 142 (8)**

WATCH PART REPLACEMENT (2 LEC., 23 LAB.) (275 CONTACT HOURS)

The precise selection and replacement of damaged watch parts are the focus of this course. Detailed procedures are covered for changing balance staffs, stems, crown, gaskets, hands, roller jewels, balance and plate jewels, pallet jewels, and mainsprings. Emphasis is on nomenclature, movement identification, and metric measurement. The use and care of many special tools are introduced, with particular emphasis on the staking tool. Laboratory fee.

**HOROLOGY (HOR) 143 (8)**

ADVANCED WATCHMAKING I (2 LEC., 23 LAB.) (275 CONTACT HOURS)

This course emphasizes the jeweled lever escapement principles, hair-spring manipulations, and position adjusting. Electronic timing machine records are analyzed to find causes of error and to make corrections. Self-winding devices and calendar watch features are thoroughly presented. Laboratory fee.

**HOROLOGY (HOR) 144 (8)**

ADVANCED WATCHMAKING II (2 LEC., 23 LAB.) (275 CONTACT HOURS)

The repair and adjustment of complicated watches are presented, including the stopwatch and wrist chronograph. Also covered are electric and electronic movements with tuning fork and quartz crystal resonators and electronic modules. Customer and business relations are practiced through estimating repairs, ordering parts, and participation in local and national craft organizations. Laboratory fee.

**HUMAN DEVELOPMENT****(HD) 100 (1)**

EDUCATIONAL ALTERNATIVES (1 LEC.)

The learning environment is introduced. Career, personal study skills, educational planning, and skills for living are all included. Emphasis is on exploring career and educational alternatives and learning a systematic approach to decision-making. A wide range of learning alternatives is covered, and opportunity is provided to participate in personal skills seminars.

**HUMAN DEVELOPMENT (HD)****102 (1)****SPECIAL TOPICS IN HUMAN DEVELOPMENT (1 LEC.)**

This is a course intended to help the student succeed in college. Topics such as stress management, communications training for the handicapped, career exploration techniques, or educational concerns of adult students may be included. This course may be repeated for credit.

**HUMAN DEVELOPMENT (HD) 104 (3)****EDUCATIONAL AND CAREER PLANNING (3 LEC.)**

This course is designed to teach students the on-going process of decision making as it relates to career/life and educational planning. Students identify the unique aspects of themselves (interests, skills, values). They investigate possible work environments and develop a plan for personal satisfaction. Job search and survival skills are also considered.

**HUMAN DEVELOPMENT (HD)****105 (3)****RELATIONSHIPS (3 LEC.)**

This course is designed to help the student increase self-awareness and to learn to relate more effectively to others. Students are made aware of their feelings, values, attitudes and behaviors. The course content focuses on developing communication skills such as assertiveness, verbal and non-verbal behavior, listening, and conflict resolution.

**HUMAN DEVELOPMENT (HD)****106 (3)****PERSONAL AND SOCIAL GROWTH (3 LEC.)**

This course focuses on the interaction between the individual and society. Societal influences, adjustment to social change, personal roles, and problem-solving are stressed. Components of a healthy personality, alternative behaviors, and lifestyles that demonstrate a responsibility to self and society are studied.

**HUMAN DEVELOPMENT (HD)****107 (3)****DEVELOPING LEADERSHIP BEHAVIOR (3 LEC.)**

The basic purpose of this course is to help the student develop leadership and human relation skills. Topics include individual and group productivity, value systems, appropriate communication skills, and positive attitudes in a group environment. The concepts of leadership are explored through both theory and practice. These leadership activities can be applied to the student's personal, business, and professional interactions.

**HUMAN DEVELOPMENT (HD)****110 (1)****ASSESSMENT OF PRIOR LEARNING****(1 LEC.)**

**Prerequisite:** Limited to students in Technical/Occupational programs. The consent of the instructor is required. This course is designed to assist students in documenting prior learning for the purpose of applying for college credit. Students develop a portfolio which includes a statement of educational/career goals, related non-collegiate experiences which have contributed to college-level learning, and documentation of such experiences. This course may be repeated for credit.

**HUMANITIES (HUM) 101 (3)****INTRODUCTION TO THE HUMANITIES (3 LEC.)**

Related examples of humans' creative achievements are examined. Emphasis is on understanding the nature of humans and the values of human life. (This course is offered on campus and may be offered via television. Laboratory fee required for television course.)

**JOURNALISM (JN) 101 (3)****INTRODUCTION TO MASS COMMUNICATIONS (3 LEC.)**

This course surveys the field of mass communications. Emphasis is on the role of mass media in modern society.

**JOURNALISM (JN) 102 (3)****NEWS GATHERING AND WRITING (2 LEC., 3 LAB.)**

**Prerequisite:** Typing ability. This course focuses upon recognizing newsworthy events, gathering information and writing the straight news story. It provides a basis for future study in newspaper and magazine writing, advertising, broadcast journalism and public relations. Students are required to write for the campus newspaper.

**JOURNALISM (JN) 103 (3)****NEWS GATHERING AND WRITING (2 LEC., 3 LAB.)**

**Prerequisite:** Journalism 102 or professional experience approved by the instructor. This course is a continuation of Journalism 102. Students study and practice writing more complex stories, such as features, profiles, follow-up stories, and sidebars. Students are required to write for the campus newspaper.

**JOURNALISM (JN) 104 (1)****STUDENT PUBLICATIONS (3 LAB.)**

**Prerequisite:** The consent of the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. Individual

staff assignments are made for the student newspaper. Assignments may be made in writing, advertising, photography, cartooning, or editing. Students are required to work at prescribed periods under supervision and must attend staff meetings.

**JOURNALISM (JN) 105 (1)****STUDENT PUBLICATIONS (3 LAB.)**

**Prerequisite:** The consent of the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. This course is a continuation of Journalism 104.

**JOURNALISM (JN) 106 (1)****STUDENT PUBLICATIONS (3 LAB.)**

**Prerequisite:** The consent of the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. The course is a continuation of Journalism 105.

**JOURNALISM (JN) 201 (3)****FEATURE WRITING (3 LEC.)**

**Prerequisite:** Six hours of journalism or the consent of the instructor. This course covers research, interviewing techniques, and the development of feature stories for use in newspapers and magazines.

**JOURNALISM (JN) 204 (3)****NEWS EDITING AND COPY READING (3 LEC.)**

**Prerequisite:** Journalism 102. This course focuses on editing news for newspaper, radio, and television. Emphasis is on writing headlines and laying out pages.

**LIBRARY SKILLS (LS) 101 (3)****INTRODUCTION TO LIBRARY RESEARCH (3 LEC.)**

In this course the student explores the various types of print and non-print sources of information and learns to document research. Emphasis is on practical skills with a great deal of hands-on experience. The course skills consist of lectures as well as the following learning experiences: (1) examination of the specific materials covered in the lecture, (2) completion of appropriate exercises designed to build basic skills used in research, and (3) conference with each student to determine rate of progress and to provide guidance on an individual basis.

**MACHINE PARTS INSPECTION (MPI)  
122 (3)**INDUSTRIAL QUALITY CONTROL AND  
PROCEDURES (3 LEC.)

Prerequisite: The consent of the instructor. An overview of the history of industrial practices, present trends and opportunities in the field of quality control are explored. Emphasis is on stimulating interest in the quality control field, and information is provided to help prepare the student for possible future employment. MVC ONLY

**MACHINE PARTS INSPECTION (MPI)  
124 (5)**BASIC INSPECTION FUNDAMENTALS (1 LEC., 8  
LAB.)

Prerequisite: The consent of the instructor. The basics of inspection fundamentals are stressed and include terminology, use of basic measuring instruments, and measuring techniques. The student gains a respect for the complex nature of industrial quality control techniques in practice today. The laboratory experiences bring together theory and practical applications appropriate to prepare for the entrance into productive industrial experiences. The use and care of measuring instruments becomes a familiar daily task through laboratory exercises. MVC ONLY

**MACHINE PARTS INSPECTION (MPI)  
135 (5)**INTERMEDIATE INSPECTION CONCEPTS (1  
LEC., 8 LAB.)

Prerequisite: Machine Parts Inspection 124 or the consent of the instructor. The more complicated aspects of industrial inspection are emphasized as the basics are reviewed and applied through the laboratory experiences. Inspection bookkeeping is introduced as a more specific part of the curriculum, and more complex measuring and holding devices are explored. Accuracy and reliability are stressed as more amplification is introduced in each measuring technique. Optical and pneumatic comparators are introduced, and light wave systems are discussed. MVC ONLY

**MACHINE PARTS INSPECTION (MPI)  
138 (3)**GEOMETRIC TOLERANCING AND TRUE  
POSITIONING (2 LEC., 2 LAB.)

Prerequisite: The consent of the instructor. This basic course is designed to prepare students entering the manufacturing industries for the complex techniques and practices using geometric symbols related to engineering, production, and quality control operations. The advantages of a system of geometric symbols which provides dimensioning and tolerancing

with respect to actual function and relationship of part features are stressed. Practical application connects this complex theory with the practical world of automated, computerized industry today. MVC ONLY

**MACHINE PARTS INSPECTION (MPI)  
220 (3)**INTRODUCTION TO MATERIALS AND  
PROCESSES (3 LEC.)

Prerequisite: Machine Parts Inspection 122 and Quality Control Technology 122 or the consent of the instructor. Information concerning properties of materials inherent and acquired in industry today is presented, including basic information to help prepare a student for making decisions concerning future training in specialized fields. The areas covered include metals, woods, plastics and natural products and their relationship to industry in the natural state, during processing, and the final usage. MVC ONLY

**MACHINE PARTS INSPECTION (MPI)  
223 (5)**ADVANCED INSPECTION CONCEPTS (1 LEC., 8  
LAB.)

Prerequisite: Machine Parts Inspection 124 and 135 or the consent of the instructor. Reviews of all inspection techniques are covered before embarking on the study of the most complex equipment and techniques. Coordinate measuring instruments, optical flats, X-ray inspection and electronic comparators are studied. Calibration of all types of measuring and inspection equipment is studied under classroom and laboratory — field trip — on the job conditions. The most complex systems and techniques are encountered and explored. MVC ONLY

**MACHINE PARTS INSPECTION (MPI)  
227 (3)**

NON-DESTRUCTIVE TESTING (3 LEC.)

Prerequisite: Machine Parts Inspection 121, 220 and Quality Control Technology 122 or the consent of the instructor. An in-depth study is made of ultrasonic, radiographic, and magnetic particle techniques relating to industrial testing. An overview of all the related areas of non-destructive testing is included in the program. MVC ONLY

**MACHINE PARTS INSPECTION (MPI)  
230 (3)**INTRODUCTION TO STATISTICAL QUALITY  
CONTROL TECHNIQUES (3 LEC.)

Prerequisite: The consent of the instructor. This course provides a review of the basic application of statistical methods in a simplified form. Concepts of tolerances, acceptance sampling, standard sampling plans, control chart, and analysis of process variation are introduced. Only basic arithmetic is required. MVC ONLY

**MACHINE PARTS INSPECTION (MPI)  
237 (3)**GAGE CONTROL STANDARDIZATION AND  
PRECISION MEASUREMENT (2 LEC., 4 LAB.)

Prerequisite: The consent of the instructor. Inventory and gage security and calibration are stressed with emphasis on a general knowledge of all inspection equipment and a practical use of all items. Statistical treatment of data is introduced. MVC ONLY

**MACHINE PARTS INSPECTION (MPI)  
803 and 813 (3)**

(See Cooperative Work Experience)

**MACHINE SHOP (MS) 133 (5)**

BASIC LATHE (1 LEC., 8 LAB.)

Practical experience is provided in the use of hand tools, layout, and hand threading. Various types of drill press work and engine lathe operations are introduced. Emphasis is on safety measures. The types and uses of machine oils, greases, coolants, and cutting oils are also included. Laboratory fee.

**MACHINE SHOP (MS) 134 (5)**

BASIC MILLING MACHINE (1 LEC., 8 LAB.)

This course focuses on hand threading. Drill press work and milling machine operations are presented. Machine parts, cutters, and arbors are covered. Emphasis is on safety measures. The types and uses of machine oils, greases, coolants, and cutting oils are also included. Laboratory fee.

**MACHINE SHOP (MS) 135 (5)**

INTERMEDIATE LATHE (1 LEC., 8 LAB.)

Prerequisite: Machine Shop 133. This course is the intermediate study of the engine lathe. Workpieces are more complicated and tolerances more exacting. Various machines and workholding methods are used. Precision layout and measuring tools are introduced. Additional work in determining cutting speeds and feeds is also included. Laboratory fee.

**MACHINE SHOP (MS) 136 (5)**INTERMEDIATE MILLING  
MACHINE (1 LEC., 8 LAB.)

Prerequisite: Machine Shop 134. This course is the intermediate study of the milling machine. Workpieces are more complicated and tolerances more exacting. Various machines and workholding methods are used. Precision layout and measuring tools are introduced. Additional work in determining cutting speeds and feeds is also included. Laboratory fee.

**MACHINE SHOP (MS) 151 (3)**BASIC MACHINE OPERATION  
FOR WELD TOOLING (1 LEC., 4 LAB.)

Simple weld tooling is studied. Shop safety is stressed. Actual weld fixture components and weld fixtures are made using engine lathes, the milling machine, and drill presses. Laboratory fee.

**MACHINE SHOP (MS) 233 (5)**

ADVANCED LATHE (1 LEC., 8 LAB.)

This course is the advanced study of the engine lathe. Skill is developed in making open setups and in locating holes by means of layout and triangulation. Various attachments and accessories are used. Surface grinding and grinding wheel safety are introduced. Laboratory fee.

**MACHINE SHOP (MS) 234 (5)**

ADVANCED MILLING MACHINE (1 LEC., 8 LAB.)

This course is the advanced study of the milling machine. Skill is developed in making open setups and in locating of holes by means of layout and triangulation. Various attachments and accessories are used. Surface grinding and grinding wheel safety are introduced. Laboratory fee.

**MACHINE SHOP (MS) 235 (5)**

APPLIED LATHE (1 LEC., 8 LAB.)

Students are encouraged to take Machine Shop 236 concurrently with Machine Shop 235. In this course the student must independently carry out assignments on the lathe. Emphasis is on the interchangeability of workpieces, fits, and finishes. Initiative and ingenuity are encouraged. Tool and cutter grinding is introduced. Laboratory fee.

**MACHINE SHOP (MS) 236 (5)**

APPLIED MILLING MACHINE (1 LEC., 8 LAB.)

The student is encouraged to take Machine Shop 235 concurrently with Machine Shop 236. In this course the student must independently carry out assignments on the milling machine. Emphasis is on the interchangeability of workpieces, fits, and finishes. Initiative and ingenuity are encouraged. Tool and cutter grinding is introduced. Laboratory fee.

**MACHINE SHOP (MS)  
COOPERATIVE WORK EXPERIENCE**

701, 711, 801, 811 (1)

702, 712, 802, 812 (2)

703, 713, 803, 813 (3)

704, 714, 804, 814 (4)

**MANAGEMENT (MGT) 136 (3)**

PRINCIPLES OF MANAGEMENT (3 LEC.)

The process of management is studied. The functions of planning, organizing, leading, and controlling are included. Particular emphasis is on policy formulation, decision-making processes, operating problems, communications theory, and motivation techniques.

**MANAGEMENT (MGT) 137 (3)**

PRINCIPLES OF RETAILING (3 LEC.)

The operation of the retail system of distribution is examined. Topics include consumer demand, requirements, computer use, store location and layout, and credit policies. Interrelationships are emphasized.

**MANAGEMENT (MGT) 150 (4)**

MANAGEMENT TRAINING (20 LAB.)

Prerequisite: Concurrent enrollment in Management 154 or the consent of the instructor. This course consists of supervised on-the-job training, giving practical experience to students of Business Management. The course is designed to develop the student's managerial skills through the completion of job-related projects which will enhance and complement classroom knowledge.

**MANAGEMENT (MGT) 151 (4)**

MANAGEMENT TRAINING (20 LAB.)

Prerequisite: Concurrent enrollment in Management 155 or the consent of the instructor. This course consists of supervised on-the-job training, giving practical experience to students of Business Management. The course is designed to develop the student's managerial skills through the completion of job-related projects which will enhance and complement classroom knowledge.

**MANAGEMENT (MGT) 153 (3)**SMALL BUSINESS MANAGEMENT  
(48 CONTACT HOURS)

The student will be studying the fundamental approaches to planning, establishing and operating a small business. The day-to-day operation of the business and reporting procedures will be studied as well as exploring the concepts of general management.

**MANAGEMENT (MGT) 154 (2)**

MANAGEMENT SEMINAR: ROLE OF SUPERVISION (2 LEC.)

Prerequisite: Concurrent enrollment in Management 150 or the consent of the instructor. This seminar is designed to explore the role of the supervisor from an applied approach. Emphasis is on improving leadership skills, motivational techniques, effective time management, goal-setting, planning and overcoming communication problems.

**MANAGEMENT (MGT) 155 (2)**

MANAGEMENT SEMINAR: PERSONNEL MANAGEMENT (2 LEC.)

Prerequisite: Concurrent enrollment in Management 151 or the consent of the instructor. This course is designed to explore the manager's role in attracting, selecting, and retaining qualified employees. Planning for and recruiting employees, selecting high performers, improving interviewing skills,

conducting performance appraisals, training, EEO legislation, and labor relations are emphasized through an applied approach.

**MANAGEMENT (MGT) 157 (3)**SMALL BUSINESS  
BOOKKEEPING AND  
ACCOUNTING PRACTICES (3 LEC.)

This course focuses on basic bookkeeping and accounting techniques for the small business. The techniques are applied to the analysis and preparation of basic financial statements.

**MANAGEMENT (MGT) 171 (3)**INTRODUCTION TO  
SUPERVISION (3 LEC.)

Prerequisite: Enrollment in Technical/Occupational program or the consent of the instructor. This course is a study of today's supervisors and their problems. The practical concepts of modern-day, first-line supervision are described. Emphasis is on the supervisor's major functions, such as facilitating relations with others, motivating, communicating, handling grievances, recruiting, counseling, and cost accounting.

**MANAGEMENT (MGT) 206 (3)**

PRINCIPLES OF MARKETING (3 LEC.)

The scope and structure of marketing are examined. Marketing functions, consumer behavior, market research, sales forecasting, and relevant state and federal laws are analyzed.

**MANAGEMENT (MGT) 210 (3)**SMALL BUSINESS  
CAPITALIZATION,  
ACQUISITION AND FINANCE (3 LEC.)

The student studies alternative strategies of financial planning, capitalization, profits, acquisition, ratio analysis, and other related financial operations required of small business owners. The preparation and presentation of a loan proposal are included.

**MANAGEMENT (MGT) 211 (3)**

SMALL BUSINESS OPERATIONS (3 LEC.)

Problems of daily operations of small business are introduced. Topics include compliance with regulations, personnel administration, accounts receivable management, and business insurance.

**MANAGEMENT (MGT) 212 (1)**SPECIAL PROBLEMS IN  
BUSINESS (1 LEC.)

Each student will participate in the definition and analysis of current business problems. Special emphasis will be placed upon relevant problems and pragmatic solutions that integrate total knowledge of the business process in American society. This course may be repeated for credit up to a maximum of three hours credit.



**MANAGEMENT (MGT) 230 (3)**  
SALESMANSHIP (3 LEC.)

The selling of goods and ideas is the focus of this course. Buying motives, sales psychology, customer approach and sales techniques are studied.

**MANAGEMENT (MGT) 233 (3)**  
ADVERTISING AND SALES PROMOTION (3 LEC.)

This course introduces the principles, practices, and media of persuasive communication. Topics include buyer behavior, use of advertising media, and methods of stimulating salespeople and retailers. The management of promotion programs is covered, including goals, strategies, evaluation, and control of promotional activities.

**MANAGEMENT (MGT) 242 (3)**  
PERSONNEL ADMINISTRATION (3 LEC.)

This course presents the fundamentals, theories, principles, and practices of people management. Emphasis is on people and their employment. Topics include recruitment, selection, training, job development, interactions with others, labor management relations, and government regulations. The managerial functions of planning, organizing, staffing, directing, and controlling are also covered.

**MANAGEMENT (MGT) 250 (4)**  
MANAGEMENT TRAINING (20 LAB.)

Prerequisite: Concurrent enrollment in Management 254 or the consent of the instructor. This course consists of supervised on-the-job training, giving practical experience to students of Business Management. The course is designed to develop the student's managerial skills through the completion of job-related projects which will enhance and complement classroom knowledge.

**MANAGEMENT (MGT) 251 (4)**  
MANAGEMENT TRAINING (20 LAB.)

Prerequisite: Concurrent enrollment in Management 255 or the consent of the instructor. This course consists of supervised on-the-job training, giving practical experience to students of Business Management. The course is designed to develop the student's managerial skills through the completion of job-related projects which will enhance and complement classroom knowledge.

**MANAGEMENT (MGT) 254 (2)**  
MANAGEMENT SEMINAR: ORGANIZATIONAL DEVELOPMENT (2 LEC.)

Prerequisite: Concurrent enrollment in Management 250 or the consent of the instructor. The role of managers in managing human resources, group interaction and team building, motivational dynamics, improving interper-

sonal communication skills, and dealing with company politics and conflict are explored in this course through an applied approach.

**MANAGEMENT (MGT) 255 (2)**  
MANAGEMENT SEMINAR: PLANNING, STRATEGY, AND THE DECISION PROCESS (2 LEC.)

Prerequisite: Concurrent enrollment in Management 251 or the consent of the instructor. This course is designed to develop managerial skills in individual and group decision-making and cause analysis. Rational and creative problem-solving skills are developed. Personal and organizational strategy skills are enhanced.

**MATHEMATICS**

(See also Developmental Mathematics. Supplementary instruction in mathematics is available through the Learning Resources Center.)

**MATHEMATICS (MTH) 101 (3)**  
COLLEGE ALGEBRA (3 LEC.)

Prerequisite: Two years of high school algebra or Developmental Mathematics 093. This course is a study of functions and relations, absolute values, variation, quadratic equations, complex numbers, functions of two variables, systems of equations and inequalities, elementary aspects of the theory of equations, progressions, the binomial theorem, and algebraic proof.

**MATHEMATICS (MTH) 102 (3)**  
PLANE TRIGONOMETRY (3 LEC.)

Prerequisite: Mathematics 101 or equivalent. This course is a study of angular measure, functions of angles, identities, solution of triangles, equations, inverse trigonometric functions, logarithms, and complex numbers.

**MATHEMATICS (MTH) 111 (3)**  
MATHEMATICS FOR BUSINESS AND ECONOMICS I (3 LEC.)

Prerequisite: Two years of high school algebra or Developmental Mathematics 093. This course includes equations, inequalities, matrices, linear programming, and linear, quadratic, polynomial, rational, exponential, and logarithmic functions. Applications to business and economics problems are emphasized.

**MATHEMATICS (MTH) 112 (3)**  
MATHEMATICS FOR BUSINESS AND ECONOMICS II (3 LEC.)

Prerequisite: Mathematics 111. This course includes sequences and limits, differential calculus, integral calculus, and appropriate applications.

**MATHEMATICS (MTH) 115 (3)**  
COLLEGE MATHEMATICS I (3 LEC.)

Prerequisites: One year of high school algebra and one year of high school geometry or two years of high school algebra or Developmental Mathematics 093. Designed for liberal arts students, this course includes the study of logic, mathematical patterns, mathematical recreations, systems of numeration, mathematical systems, sets and statements and sets of numbers. Historical aspects of selected topics are emphasized.

**MATHEMATICS (MTH) 116 (3)**  
COLLEGE MATHEMATICS II (3 LEC.)

Prerequisite: One year of high school algebra and one year of high school geometry or two years of high school algebra or Developmental Mathematics 093. Designed for liberal arts students, this course includes the study of algebra, linear programming, permutations, combinations, probability and geometry. Historical aspects of selected topics are emphasized.

**MATHEMATICS (MTH) 117 (3)**  
FUNDAMENTAL CONCEPTS OF MATHEMATICS FOR ELEMENTARY TEACHERS (3 LEC.)

This course includes the structure of the real number system, geometry, and mathematical analysis. Emphasis is on the development of mathematical reasoning needed for elementary teachers.

**MATHEMATICS 121 (3)**  
ANALYTIC GEOMETRY (3 LEC.)

Prerequisite: Mathematics 102 or equivalent. This course is a study of the real numbers, distance, the straight line, conics, transformation of coordinates, polar coordinates, parametric equations, and three-dimensional space.

**MATHEMATICS (MTH) 124 (5)**  
CALCULUS I (5 LEC.)

Prerequisite: Mathematics 105 or 106 or 121 or the equivalent. This course is a study of limits, continuity, derivatives, and integrals of algebraic and transcendental functions, with applications.

**MATHEMATICS (MTH) 130 (3)**  
BUSINESS MATHEMATICS (3 LEC.)

Prerequisite: One year of high school algebra or Developmental Mathematics 091 or the equivalent. This course is intended primarily for students in specialized occupational programs. It is a study of simple and compound interest, bank discount, payrolls, taxes, insurance, mark up and mark down, corporate securities, depreciation, and purchase discounts.



**MATHEMATICS (MTH) 195 (3)**  
TECHNICAL MATHEMATICS (3 LEC.) (48  
CONTACT HOURS)

Prerequisite: One year of high school algebra or Development Mathematics 091 or the equivalent. This course is designed for technical students. It covers a general review of arithmetic, the basic concepts and fundamental facts of plane and solid geometry, computational techniques and devices, units and dimensions, the terminology and concepts of elementary algebra, functions, coordinate systems, simultaneous equations, and stated problems.

**MATHEMATICS (MTH) 198 (3)**  
TECHNICAL MATHEMATICS (3 LEC.)

Prerequisite: Mathematics 195. This course is designed for technical students. It includes a study of topics in algebra, an introduction to logarithms, and an introduction to trigonometry, trigonometric functions and the solution of triangles.

**MATHEMATICS (MTH) 202 (3)**  
INTRODUCTORY STATISTICS (3 LEC.)

Prerequisite: Two years of high school algebra or consent of instructor. This course is a study of collection and tabulation of data, bar charts, graphs, sampling, measures of central tendency and variability, correlation, index numbers, statistical distributions, probability, and application to various fields.

**MATHEMATICS (MTH) 221 (3)**  
LINEAR ALGEBRA (3 LEC.)

Prerequisite: Mathematics 124 or equivalent. This course is a study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, n-dimensional space, and linear transformation.

**MATHEMATICS (MTH) 225 (4)**  
CALCULUS II (4 LEC.)

Prerequisite: Mathematics 124 or the equivalent. This course is a study of techniques of integration, polar coordinates, parametric equations, topics in vector calculus, sequences, series, indeterminate forms, and partial differentiation with applications.

**MATHEMATICS (MTH) 226 (3)**  
CALCULUS III (3 LEC.)

Prerequisite: Mathematics 225 or the equivalent. This course is a study of topics in vector calculus, functions of several variables, and multiple integrals, with applications.

**MATHEMATICS (MTH) 230 (3)**  
DIFFERENTIAL EQUATIONS (3 LEC.)

Prerequisite: Mathematics 225 or the consent of the instructor. This course is a study of ordinary differential equations; including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and applications.

**MUSIC (MUS) 101 (4)**  
FRESHMAN THEORY (3 LEC., 3 LAB.)

Musicianship skills are developed. Emphasis is on tonal and rhythmic perception and articulation. The essential elements of music are presented, and sight-singing, keyboard, and notation are introduced.

**MUSIC (MUS) 102 (4)**  
FRESHMAN THEORY (3 LEC., 3 LAB.)

Prerequisite: Music 101 or the consent of the instructor. This course introduces part-writing and harmonization with triads and their inversions. Also included are the classification of chords, seventh chords, sight-singing, dictation, and keyboard harmony.

**MUSIC (MUS) 103 (1)**  
GUITAR ENSEMBLE (3 LAB.)

Music composed and arranged for a guitar ensemble is performed. Works for a guitar and a different instrument or for guitar and a voice are also included. This course may be repeated for credit.

**MUSIC (MUS) 104 (3)**  
MUSIC APPRECIATION (3 LEC.)

The basic elements of music are surveyed and examined in the music literature of western civilization, particularly from the Baroque Period to the present. Cultural influences on the music of each era are observed.

**MUSIC (MUS) 110 (3)**  
MUSIC LITERATURE (3 LEC.)

The music of recognized composers in the major periods of music history is examined. Topics include the characteristics of sound, elements of music, performance media, and musical texture. Emphasis is on the music of the late Gothic, Renaissance and Baroque eras.

**MUSIC (MUS) 111 (3)**  
MUSIC LITERATURE (3 LEC.)

Prerequisite: Music 110. This course is a continuation of Music 110. The compositional procedures and forms used by composers are studied. Emphasis is on the Classical, Romantic, and Modern periods.

**MUSIC (MUS) 112 (3)**  
GUITAR LITERATURE AND  
MATERIALS (3 LEC.)

The body of music for the guitar is surveyed. Emphasis is on the repertoire of instruments in the guitar family, such as the lute. Transcription and arranging are studied as well as the selection of a program for public performance.

**MUSIC (MUS) 113 (3)**  
FOUNDATIONS OF MUSIC I (3 LEC.)

This course focuses on participation and skills for satisfactory performance in singing, playing an instrument, listening, and creating rhythmic responses. The ability to manage notation (music reading) is developed.

**MUSIC (MUS) 114 (3)**  
FOUNDATIONS IN MUSIC II (3 LEC.)

Prerequisite: Music 113. This course prepares students with limited music training for Music 101 and increases their general music understanding. Emphasis is on rhythmic and melodic training, chord functions, melody, textures, and basic analysis of music.

**MUSIC (MUS) 115 (2)**  
JAZZ IMPROVISATION (1 LEC., 2 LAB.)

The art of improvisation is introduced. Basic materials, aural training, analysis, and common styles are presented. This course may be repeated for credit.

**MUSIC (MUS) 117 (1)**  
PIANO CLASS I (2 LAB.)

This course is primarily for students with no knowledge of piano skills. It develops basic musicianship and piano skills. This course may be repeated for credit.

**MUSIC (MUS) 118 (1)**  
PIANO CLASS II (2 LAB.)

The study of piano is continued. Included are techniques, skills, harmonization, transposition, improvisation, accompanying, sight-reading, and performing various styles of repertoire. This course may be repeated for credit.

**MUSIC (MUS) 119 (1)**  
GUITAR CLASS I (2 LAB.)

This course is primarily for students with limited knowledge in reading music or playing the guitar. It develops basic guitar skills. This course may be repeated for credit.

**MUSIC (MUS) 120 (1)**  
GUITAR CLASS II (2 LAB.)

Prerequisite: Music 119 or the equivalent. This course is a continuation of Music 119. Emphasis is on classical guitar techniques and music reading skills. This course may be repeated for credit.

**MUSIC (MUS) 121-143 (1)**

APPLIED MUSIC-MINOR (1 LEC.)

This course is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the student's secondary area and consists of a one-half hour lesson a week. Fee required. Private music may be repeated for credit.

**MUSIC (MUS) 150 (1)**

CHORUS (3 LAB.)

Prerequisite: Consent of instructor. A wide variety of music representing the literature of the great eras of music history is studied and performed. This course may be repeated for credit.

**MUSIC (MUS) 151 (1)**

VOICE CLASS I (2 LAB.)

This course is for non-voice majors. It presents the principles of breathing, voice production, tone control, enunciation, and phrasing in two group lessons a week. This course may be repeated for credit.

**MUSIC (MUS) 152 (1)**

VOICE CLASS II (2 LAB.)

This course is a continuation of Music 151. It is open to all non-voice majors. Emphasis is on solo singing, appearance in studio recital, stage deportment, and personality development. Two group lessons are given a week. This course may be repeated for credit.

**MUSIC (MUS) 155 (1)**

VOCAL ENSEMBLE (3 LAB.)

A group of mixed voices concentrates on excellence of performance. Membership is open to any student by audition. The director selects those who possess special interest and skill in the performance of advanced choral literature. This course may be repeated for credit.

**MUSIC (MUS) 156 (1)**

MADRIGAL SINGERS (3 LAB.)

A group of vocalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 160 (1)**

BAND (3 LAB.)

Prerequisite: The consent of the instructor is required for non-wind instrument majors. The band studies and performs a wide variety of music in all areas of band literature. This course may be repeated for credit.

**MUSIC (MUS) 170 (1)**

ORCHESTRA (3 LAB.)

Experience is provided in performing and reading orchestral literature and in participating in the college orchestra. This course may be repeated for credit.

**MUSIC (MUS) 171 (1)**

WOODWIND ENSEMBLE (3 LAB.)

A group of woodwind instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 172 (1)**

BRASS ENSEMBLE (3 LAB.)

A group of brass instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 173 (1)**

PERCUSSION ENSEMBLE (3 LAB.)

A group of percussion instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 174 (1)**

KEYBOARD ENSEMBLE (3 LAB.)

A group of keyboard instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 175 (1)**

STRING ENSEMBLE (3 LAB.)

A group of string instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 176 (1)**

SYMPHONIC WIND ENSEMBLE (3 LAB.)

In the symphonic wind ensemble students study and perform stylistic literature of all periods. This course may be repeated for credit.

**MUSIC (MUS) 177 (1)**

CHAMBER ENSEMBLE (3 LAB.)

A group of chamber instrumentalists or vocalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 181 (1)**

LAB BAND (3 LAB.)

Prerequisite: The consent of the instructor. In the Lab Band students study and perform all forms of commercial music, such as jazz, pop, avant-garde, and soul. Student arranging, composing, and conducting

is encouraged. This course may be repeated for credit.

**MUSIC (MUS) 185 (1)**

STAGE BAND (3 LAB.)

Prerequisite: The consent of the instructor. In the Stage Band students study and perform a wide variety of music. Emphasis is on the jazz-oriented, big-band styles of the 1960's. This may be repeated for credit.

**MUSIC (MUS) 199 (1)**

RECITAL (2 LAB.)

Students of private lessons perform before an audience one period each week. Credit for this course does not apply to the Associate Degree. This course may be repeated for credit.

**MUSIC (MUS) 201 (4)**

SOPHOMORE THEORY (3 LEC., 3 LAB.)

Prerequisite: Music 101 and 102 or the consent of the instructor. This course is a continuation of the study of theory. Topics include larger forms, thematic development, chromatic chords such as the Neapolitan sixth and augmented sixth chords, and diatonic seventh chords. Advanced sight-singing, keyboard harmony, and ear training are also included.

**MUSIC (MUS) 202 (4)**

SOPHOMORE THEORY (3 LEC., 3 LAB.)

Prerequisite: Music 201 or the equivalent or the consent of the instructor. This course is a continuation of Music 201. Topics include the sonata-allegro form and the ninth, eleventh, and thirteenth chords. New key schemes, impressionism, melody, harmony, tonality and formal processes of 20th century music are also included. Sight-singing, keyboard harmony, and ear training are developed further.

**MUSIC (MUS) 203 (3)**

COMPOSITION (3 LEC.)

Prerequisite: Music 101 and 102 or the consent of the instructor. This course covers composing in small forms for simple media in both traditional styles and styles of the student's choice. The course may be repeated for credit.

**MUSIC (MUS) 204 (2)**

GUITAR PEDAGOGY (2 LEC.)

Guitar method books are surveyed. Emphasis is on the strengths and weaknesses of each method. Structuring lessons and optimizing each individual teacher-student relationship are also discussed.

**MUSIC (MUS) 221-243 (2)**

APPLIED MUSIC-CONCENTRATION (1 LEC.)

This course is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction

in the area of the student's concentration and consists of two half-hour lessons a week. Fee required. Private music may be repeated for credit.

**MUSIC (MUS) 251-270 (3)**  
APPLIED MUSIC-MAJOR (1 LEC.)

This course is primarily for music performance majors and is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the area of the student's major instrument, and consists of two half-hour lessons a week. Fee required.

**OFFICE CAREERS (OFC) 103 (4)**  
SPEEDWRITING THEORY (3 LEC., 2 LAB.)

Prerequisite: Credit or concurrent enrollment in Office Careers 172 or one year of typing. The principles of speedwriting are introduced. Included is the development of the ability to read, write, and transcribe speedwriting notes. Basic spelling, grammar, and punctuation rules are reviewed.

**OFFICE CAREERS (OFC) 104 (3)**  
SPEEDWRITING DICTATION AND TRANSCRIPTION (3 LEC.)

Prerequisite: Office Careers 103, Office Careers 172, or one year of typing. Principles of speedwriting are applied to build dictation speed and transcription rate. Special attention is given to the review of grammar, spelling, and punctuation rules.

**OFFICE CAREERS (OFC) 143 (1)**  
CONTEMPORARY TOPICS IN OFFICE CAREERS (1 LEC.)

Prerequisite: The consent of the instructor. This course emphasizes current topics of interest in office career fields. Realistic solutions to problems relevant to the needs of industry are presented. This course may be repeated for credit with different emphasis up to six hours.

**OFFICE CAREERS (OFC) 152 (3)**  
INTRODUCTION TO RECORDS MANAGEMENT (3 LEC.)

A survey course in the policies and principles affecting the creation, protection, circulation, retrieval, preservation and control of business and institutional records. The course includes basic classification systems, history and status of records management, retention and disposition of records, maintenance procedures and career ladders.

**OFFICE CAREERS (OFC) 159 (4)**  
BEGINNING SHORTHAND (3 LEC., 2 LAB.)  
Prerequisites: Credit or concurrent enrollment in Office Careers 172 or one year of typing in high school. The principles of Gregg Shorthand are introduced. Included is the

development of the ability to read, write, and transcribe shorthand outlines. Knowledge of the mechanics of English is also developed. Laboratory fee.

**OFFICE CAREERS (OFC) 160 (3)**  
OFFICE CALCULATING MACHINES (3 LEC.)

This course focuses on the development of skills in using electronic calculators. Emphasis is on developing the touch system for both speed and accuracy. Business math and fundamentals are reviewed.

**OFFICE CAREERS (OFC) 162 (3)**  
OFFICE PROCEDURES (3 LEC.)

Prerequisite: Office Careers 172 or one year of typing in high school. The duties, responsibilities, and personal qualifications of the office worker are emphasized. Topics include filing, reprographics, mail, telephone, financial transactions, and job applications.

**OFFICE CAREERS (OFC) 165 (3)**  
INTRODUCTION TO WORD PROCESSING (3 LEC.)

Prerequisite: Office Careers 174 or concurrent enrollment in Office Careers 174. This course introduces word processing and describes its effect on traditional office operations. Word processing terminology and concepts for organizing word processing centers are studied. Training in the transcription and distribution of business communications is provided. English skills and mechanics are reinforced.

**OFFICE CAREERS (OFC) 166 (4)**  
INTERMEDIATE SHORTHAND (3 LEC., 2 LAB.)

Prerequisites: Office Careers 159 or one year of shorthand in high school, Office Careers 172 or one year of typing in high school. The principles of Gregg Shorthand are studied. Emphasis is on increased speed dictation, accuracy in typing from shorthand notes, and beginning techniques of transcription skills. Also included are oral reading, speedbuilding, and grammar. Laboratory fee.

**OFFICE CAREERS (OFC) 167 (3)**  
LEGAL TERMINOLOGY AND TRANSCRIPTION (3 LEC.)

Prerequisite: Completion of Office Careers 174 or typing speed of 50 words per minute; completion of Office Careers 165. Legal terms are the focus of this course. Included are the spelling and use of legal terms and Latin words and phrases. Intensive practice is provided in building speed and accuracy in the transcription of legal terms.

**OFFICE CAREERS (OFC) 172 (3)**  
BEGINNING TYPEWRITING (2 LEC., 3 LAB.)

This course is for students with no previous training in typewriting. Fundamental techniques in typewriting are developed. The skills of typing manuscripts, business letters, and tabulations are introduced. Laboratory fee.

**OFFICE CAREERS (OFC) 173 (3)**  
INTERMEDIATE TYPING (2 LEC., 3 LAB.)

Prerequisites: Office Careers 172 or one year of typing in high school. Typing techniques are developed further. Emphasis is on problem solving. Increasing speed and accuracy in typing business forms, correspondence, and manuscripts are also covered. Laboratory fee.

**OFFICE CAREERS (OFC) 176 (1)**  
BEGINNING TYPING I (1 LEC., 1 LAB.)

This course is for students with no previous training in typing. The course introduces the typewriter parts. Alphabetic keys, numeric keys, and symbol keys are covered. Fundamental techniques are refined, and speed is developed. Laboratory fee.

**OFFICE CAREERS (OFC) 177 (1)**  
BEGINNING TYPING II (1 LEC.)

Prerequisite: Office Careers 176. Practical techniques for business correspondence are developed. Memorandums, personal letters, and business letters are covered. Exercises to increase skill are stressed.

**OFFICE CAREERS (OFC) 178 (1)**  
BEGINNING TYPING III (2 LAB.)

Prerequisite: Office Careers 176. The typing of manuscripts and tables is emphasized. Production typing is included, and proper report typing is developed. Exercises to increase skills are also included. Laboratory fee.

**OFFICE CAREERS (OFC) 187 (2)**  
INTERMEDIATE SHORTHAND I (2 LEC.)

Prerequisite: Prior shorthand experience equivalent to office careers 159 or one year in high school. This course is for students who have a basic knowledge of Gregg Shorthand Theory and ability to take dictation at approximately 50 words per minute. The course is a review of selected shorthand phrases, brief forms, word families, and word beginnings and endings. Included are the proper use of basic punctuation, typing format, and simple business letters.

**OFFICE CAREERS (OFC) 188 (1)**

INTERMEDIATE SHORTHAND II (1 LEC.)

This course is designed for students who have a sound knowledge of Gregg Shorthand Theory and the ability to take dictation at approximately 70-80 words per minute. The course is a review of selected shorthand phrases, brief forms, word families, and word

**OFFICE CAREERS (OFC) 189 (1)**

INTERMEDIATE SHORTHAND III (2 LAB.)

This course is designed for students who have a thorough and complete knowledge of Gregg Shorthand Theory and are interested in increasing speed. Special attention is on producing mailable letters within certain time periods. The dictation speed is flexible and depends on student abilities.

**OFFICE CAREERS (OFC) 192 (1)**

OFFICE MACHINES I (1 LEC.)

Business mathematical skills needed to operate office machines are reviewed. Ten-key touch development is introduced. Speed development is incorporated with accuracy requirements.

**OFFICE CAREERS (OFC) 193 (1)**

OFFICE MACHINES II (1 LEC.)

Prerequisite: Office Careers 192. This course covers extensive training on the basic office machines. Speed development and business applications are included.

**OFFICE CAREERS (OFC) 194 (1)**

OFFICE MACHINES III (1 LEC.)

Prerequisite: Office Careers 192. Extensive training on basic office machines is continued. Speed development and business applications are stressed.

**OFFICE CAREERS (OFC) 231 (3)**

BUSINESS COMMUNICATIONS (3 LEC.)

Prerequisites: Credit in Office Careers 172 or one year of typing in high school; credit in Communications 131 or English 101. This practical course includes a study of letter forms, the mechanics of writing and the composition of various types of communications. A critical analysis of the appearance and content of representative business correspondence is made.

**OFFICE CAREERS (OFC) 250 (3)**

RECORDS CONTROL (3 LEC.)

Prerequisite: Office Careers 152. This course includes a comprehensive study and application of the knowledge and skills involved in the control of records and record

systems. The course includes the control procedures for the management of routine and unique correspondence, directives, proposals, reports and forms, inventory, scheduling, vital records control, records storage centers, and archives.

**OFFICE CAREERS (OFC) 252 (3)**

MICROGRAPHICS (3 LEC.)

Prerequisites: Office Careers 152. Microform (microfilm, microfiche, jacket, aperture card and COM) selection, recording, retrieval, and reproduction and technologies in an information system are studied. Special emphasis is on micrographic systems, system design, and micrographic standards.

**OFFICE CAREERS (OFC) 256 (3)**

OFFICE MANAGEMENT (3 LEC.)

This course focuses on the organization, design, and control of office activities. Topics include office practice, office services, and wage payment plans. The selection, training and supervision of employees are covered. Office planning, organizing, and controlling techniques are presented. Responsibilities of the office manager are also included.

**OFFICE CAREERS (OFC) 265 (3)**

WORD PROCESSING PRACTICES AND PROCEDURES (3 LEC.)

Prerequisite: Office Careers 165. This course concerns translating ideas into words, putting those words on paper, and turning that paper into communication. Emphasis is on training in composing and dictating business communications. Teamwork skills, priorities, scheduling, and procedures are included. Researching, storing, retrieving documents, and managing word processing systems are also covered. Transcribing and magnetic keyboarding skills are developed. Typing skills and English mechanics are reinforced.

**OFFICE CAREERS (OFC) 266 (4)**

ADVANCED SHORTHAND (3 LEC., 2 LAB.)

Prerequisites: Office Careers 166 or two years of shorthand in high school, Office Careers 174 or two years of typing in high school. Emphasis is on building dictation speed. Producing mailable, typed transcriptions under timed conditions is also stressed. Vocabulary and extensive production work capabilities are developed. Laboratory fee.

**OFFICE CAREERS (OFC) 273 (2)**

ADVANCED TYPING APPLICATIONS (1 LEC., 2 LAB.)

Decision-making and production of all types of business materials under time conditions are emphasized. A continuation of skill development and a review of typing techniques are also stressed. Accuracy at advanced speeds is demanded. Laboratory fee.

**OFFICE CAREERS (OFC) 274 (3)**

LEGAL SECRETARIAL PROCEDURES (3 LEC.)

Prerequisite: Office Careers 174 or typing speed of 50 words per minute; Office Careers 166 or shorthand dictation speed of 80 words per minute. This course focuses on procedures of the legal secretary. Topics include reminder and filing systems, telephone usage, dictation and correspondence, the preparation of legal documents, and the court system. Client contacts, use of the law library, research techniques, timekeeping, billing, bookkeeping, and ethics are also covered. Ways to obtain a position as a Legal Secretary are described.

**OFFICE CAREERS (OFC) 275 (3)**

SECRETARIAL PROCEDURES (3 LEC.)

Prerequisites: Credit or concurrent enrollment in Office Careers 174, credit or concurrent enrollment in either Office Careers 166 or Office Careers 265. Emphasis is on initiative, creative thinking, and follow-through. Topics include in-basket exercises, decision-making problems, and use of shorthand and transcription skills. Public and personal relations, supervisory principles, business ethics, and the organizing of time and work are also covered.

**OFFICE CAREERS (OFC)**

(See Cooperative Work Experience)

703, 713, 803, 813 (3)

704, 714, 804, 814 (4)

**PHILOSOPHY (PHI) 102 (3)**

INTRODUCTION TO PHILOSOPHY (3 LEC.)

The fundamental problems in philosophy are surveyed. Methods to deal with the problems are discussed. Ancient and modern views are examined as possible solutions.

**PHILOSOPHY (PHI) 105 (3)**

LOGIC (3 LEC.)

The principles of logical thinking are analyzed. The methods and tools of logic are applied to real-life situations. Fallacies, definitions, analogies, syllogisms, Venn diagrams, and other topics are discussed.

**PHILOSOPHY (PHI) 202 (3)**

INTRODUCTION TO SOCIAL AND POLITICAL PHILOSOPHY (3 LEC.)

The relationships of philosophical ideas to the community are presented. Emphasis is on concepts of natural rights, justice, education, freedom, and responsibility.

**PHILOSOPHY (PHI) 203 (3)**

ETHICS (3 LEC.)

The classical and modern theories of the moral nature of the human are surveyed. Alternative views of responsibilities to self and society are posed. Ethical issues and their metaphysical and epistemological bases are vivified. Emphasis is on applying ethical principles in life.

**PHILOSOPHY (PHI) 210 (3)**

STUDIES IN PHILOSOPHY (3 LEC.)

Prerequisite: 3 hours of philosophy and the consent of the instructor. A philosophical problem, movement, or special topic is studied. The course topic changes each semester. This course may be repeated for credit.

**PHOTOGRAPHY (PHO) 110 (3)**

INTRODUCTION TO PHOTOGRAPHY AND PHOTO-JOURNALISM (2 LEC., 4 LAB.)

Photography and photo-journalism are introduced. Topics include the general mechanics of camera lenses and shutters and the general characteristics of photographic films, papers, and chemicals. Darkroom procedures are presented, including enlarging, processing, contact printing, and exposing films and papers. Artificial lighting is studied. Laboratory fee.

**PHOTOGRAPHY (PHO) 111 (3)**

ADVANCED PHOTOGRAPHY AND PHOTO-JOURNALISM (2 LEC., 4 LAB.)

Techniques learned in Photography 110 are refined. Emphasis is on photographic communication. Laboratory fee.

**PHOTOGRAPHY (PHO) 120 (4)**

COMMERCIAL PHOTOGRAPHY I (3 LEC., 3 LAB.)

Commercial or contract photography is studied. Field, studio, and darkroom experience for various kinds of photography is discussed. Included are social photography, portrait and studio photography, fashion and theatrical portfolio, publicity photography, and convention photography. The use of natural, stationary, flash, and strobe artificial lights is covered. Laboratory fee.

**PHOTOGRAPHY (PHO) 121 (4)**

COMMERCIAL PHOTOGRAPHY II (3 LEC., 3 LAB.)

This course is a continuation of Photography 120. Publicity photography, architectural photography, interior photography, and advertising photography are included. The latest equipment, papers, films, and techniques are explored. Exchanges are made with sample clients, employers, studios, and agencies. Laboratory fee.

**PHOTOGRAPHY (PHO) 207 (3)**

PHOTOGRAPHY FOR PUBLICATIONS (2 LEC., 4 LAB.)

This course is designed for the student who is interested in journalistic editing, publications photography, and graphic arts procedures. It encourages skills in all three areas and prepares the student for a broad job market that includes photojournalism, printing, editing, composing, and general copy preparation. Students who enroll in this course should have a background in journalism, photography, and graphic arts and be of sophomore standing. Laboratory fee.

**PHYSICAL EDUCATION ACTIVITY COURSES**

The Physical Education Division provides opportunity for each student to become skilled in at least one physical activity for personal enjoyment of leisure time. Activity courses are open to both men and women. A laboratory fee is required. Students are urged to take advantage of the program by registering for a physical education activity course each semester.

**PHYSICAL EDUCATION NON-ACTIVITY COURSES**

PEH 101, 109, 110, 144

**PHYSICAL EDUCATION (PEH) 100 (1)**

LIFETIME SPORTS ACTIVITIES (3 LAB.)

Various lifetime sports are offered. Courses offered may include archery, badminton, bowling, golf, handball, racquetball, softball, swimming, tennis, and other sports. Activities may be offered singularly or in combinations. Instruction is presented at the beginner and advanced-beginner levels. Both men and women participate. This course may be repeated for credit when students select different activities. Laboratory fee.

**PHYSICAL EDUCATION****(PEH) 101 (3)**

FUNDAMENTALS OF HEALTH (3 LEC.)

This course is for students majoring or minoring in physical education or having other specific interest. Personal health and community health are studied. Emphasis is on the causes of mental and physical health and disease transmission and prevention.

**PHYSICAL EDUCATION (PEH)****104 (1)**

TOUCH FOOTBALL/SOCCER (3 LAB.)

Touch football and soccer are taught and played. Emphasis is on skill development. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****109 (3)**

OUTDOOR RECREATION (3 LEC.)

Outdoor recreation and organized camping are studied. Both the development of these activities and present trends are covered.

**PHYSICAL EDUCATION****(PEH) 110 (3)**

COMMUNITY RECREATION (3 LEC.)

This course is primarily for students majoring or minoring in health, physical education, or recreation. The principles, organization, and function of recreation in American society are covered.

**PHYSICAL EDUCATION (PEH) 112 (1)**

BEGINNING SOFTBALL AND SOCCER (3 LAB.)

Basic softball and soccer skills, rules and strategies are taught. Class tournaments are conducted. 24 class hours are devoted to each activity. Laboratory fee.

**PHYSICAL EDUCATION (PEH) 113 (1)**

BEGINNING HANDBALL AND RACQUETBALL (3 LAB.)

Basic handball and racquetball skills, rules and strategies are taught and class tournaments are conducted. 24 class hours are devoted to each activity. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****114 (1)**

BEGINNING BADMINTON (3 LAB.)

The history, rules, and skills of badminton are taught. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****115 (1)**

PHYSICAL FITNESS (3 LAB.)

The student's physical condition is assessed. A program of exercise for life is prescribed. Much of the course work is carried on in the physical performance laboratory. A uniform is required. This course may be repeated for credit. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****116 (1)**

INTRAMURAL ATHLETICS (3 LAB.)

Intramural competition in a variety of activities is offered for men and women. A uniform is required. This course may be repeated for credit. Laboratory fee.

**PHYSICAL EDUCATION (PEH) 117 (1)**

BEGINNING ARCHERY (3 LAB.)

Basic skills, rules and strategies of archery are taught. Equipment is furnished. Laboratory fee.

**PHYSICAL EDUCATION (PEH) 118 (1)**

BEGINNING GOLF (3 LAB.)

Basic skills, rules and strategies of golf are taught. Equipment is furnished. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****119 (1)**

BEGINNING TENNIS (3 LAB.)

This course is designed for the beginner. Tennis fundamentals are taught and played. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****120 (1)**

BEGINNING BOWLING (3 LAB.)

Basic skills, rules and strategy of bowling are taught. All equipment is furnished at an off campus bowling lane. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****122 (1)**

BEGINNING GYMNASTICS (3 LAB.)

Beginning gymnastics is offered. Emphasis is on basic skills in tumbling and in the various apparatus events. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****123 (1)**

BEGINNING SWIMMING (2 LAB.)

This course teaches a non-swimmer to survive in the water. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION****(PEH) 125 (1)**

CONDITIONING EXERCISE (3 LAB.)

This course focuses on understanding exercise and its effect on the body. Physical fitness is improved through a variety of conditioning activities. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****126 (1)**

AEROBIC DANCE (3 LAB.)

This is a dance class which rhythmically combines dance movement with walking, jogging, and jumping to cause sustained vigorous combination of steps, geared to raise the heart rate to a proper target zone for conditioning purposes. Each routine can be "danced" at different intensities, depending on the physical condition of each participant. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****127 (1)**

BEGINNING BASKETBALL AND VOLLEYBALL (3 LAB.)

Basic basketball and volleyball rules, skills and strategies are taught and class tournaments are conducted. Sections using men's rules and women's rules may be offered separately. 24 class hours will be devoted to each sport. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****129 (1)**

MODERN DANCE (3 LAB.)

This beginning course is designed to emphasize basic dance technique, including body alignment and placement, floor work, locomotor patterns, and creative movements. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****130 (1)**

BEGINNING TUMBLING AND TRAMPOLINE (3 LAB.)

Basic skills and techniques involved in tumbling and trampolining are taught. 24 class hours will be devoted to each activity. Laboratory fee.

**PHYSICAL EDUCATION****(PEH) 131 (1)**

WEIGHT TRAINING AND CONDITIONING (3 LAB.)

Instruction and training in weight training and conditioning techniques are offered. A uniform is required. This course may be repeated for credit. Laboratory fee.

**PHYSICAL EDUCATION****(PEH) 132 (1)**

SELF-DEFENSE (3 LAB.)

Various forms of self-defense are introduced. The history and philosophy of the martial arts are explored. The student should progress from no previous experience in self-defense to an adequate skill level covering basic self-defense situations. Both mental and physical aspects of the arts are stressed.

**PHYSICAL EDUCATION****(PEH) 134 (1)**

OUTDOOR EDUCATION (3 LAB.)

Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. Laboratory fee.

**PHYSICAL EDUCATION****(PEH) 144 (3)**

INTRODUCTION TO PHYSICAL EDUCATION (3 LEC.)

This course is for students majoring in physical education and is designed for professional orientation in physical education, health, and recreation. The history, philosophy, and modern trends of physical education are surveyed.

Topics include teacher qualifications, vocational opportunities, expected competencies, and skill testing.

**PHYSICAL EDUCATION****(PEH) 147 (3)**

SPORTS OFFICIATING I (2 LEC., 2 LAB.)

This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are football, basketball, and other sports as appropriate. Students are expected to officiate intramural games.

**PHYSICAL EDUCATION****(PEH) 148 (3)**

SPORTS OFFICIATING II (2 LEC., 2 LAB.)

This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are softball, track and field, baseball, and other sports as appropriate. Students are expected to officiate intramural games.

**PHYSICAL EDUCATION****(PEH) 200 (1)**

LIFETIME SPORTS ACTIVITIES II (3 LAB.)

This course is a continuation of Physical Education 100. Students participate in selected activities. Instruction is at the intermediate and intermediate/advanced levels. This course may be repeated for credit. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****217 (1)**

INTERMEDIATE ARCHERY (3 LAB.)

This course is for the student who has previous experience in archery. Target shooting and field archery are emphasized. The student must furnish equipment. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****218 (1)**

INTERMEDIATE GOLF (2 LAB.)

Prerequisite: The consent of the instructor. Skills and techniques in golf are developed beyond the "beginner" stage. Green fee paid by student. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****219 (1)**

INTERMEDIATE TENNIS (3 LAB.)

Prerequisite: The consent of the instructor. Skills and techniques in tennis are developed beyond the "beginner" stage. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****222 (1)**

INTERMEDIATE GYMNASTICS (3 LAB.)

Prerequisite: Physical Education 122. Skills and techniques in gymnastics are developed beyond the "beginner" stage. A uniform is required. Laboratory fee.



**PHYSICAL EDUCATION****(PEH) 223 (1)**

INTERMEDIATE SWIMMING (2 LAB.)

Prerequisite: Beginning swim certificate or deep water swimmer. This course advances the swimmer's skills. Stroke analysis, refinement, and endurance are emphasized. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION****(PEH) 225 (2)**

SKIN AND SCUBA DIVING (1 LEC., 2 LAB.)

Prerequisite: Physical Education 223 or the consent of the instructor. This course includes the use of equipment, safety, physiology, and open water diving. All equipment is supplied except mask, fins, and snorkel. The student may rent needed equipment at the time on registration. Students completing course requirements receive certification as basic scuba divers from the Professional Association of Diving Instructors (PADI) or the National Association of Underwater Instructors (NAUI). Laboratory fee.

**PHYSICAL EDUCATION****(PEH) 226 (1)**

ADVANCED LIFE SAVING (2 LAB.)

Prerequisite: Physical Education 223 or deep water swim ability. This course qualifies students for the Red Cross Advanced Lifesaving Certificate. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION (PEH)****232 (1)**

INTERMEDIATE SELF DEFENSE (3 LAB.)

Prerequisite: Physical Education 132 or the consent of the instructor. Students will be introduced to intermediate forms of defense and combination of self defense methods. Emphasis is on practical application of self defense movements. Laboratory fee.

**PHYSICAL EDUCATION****(PEH) 234 (2)**

WATER SAFETY INSTRUCTOR (1 LEC., 2 LAB.)

Prerequisite: Current Advanced Life Saving card. The principles and techniques for instructors in water safety and life saving classes are covered. Completion of the course qualifies the student to test for certification by the Red Cross as a water safety instructor. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION****(PEH) 236 (3)**

THE COACHING OF FOOTBALL AND BASKETBALL (2 LEC., 2 LAB.)

The skills and techniques of coaching football and basketball are presented. Included are the history, theories, philosophies, rules, terminology, and finer points of the sports. Emphasis is on coaching techniques.

**PHYSICAL EDUCATION****(PEH) 257 (3)**

ADVANCED FIRST AID AND EMERGENCY CARE (3 LEC.)

The Advanced First Aid and Emergency Care course of the American Red Cross is taught, presenting both theory and practice. Various aspects of safety education also are included.

**PHYSICS (PHY) 110 (4)**

INTRODUCTORY PHOTOGRAPHIC SCIENCE (3 LEC., 3 LAB.)

Prerequisites: Photography 110, Art 113, or the consent of the instructor, and access to a camera with variable speed and aperture. This course introduces the physical and chemical principles which form the basis for photographic technology. Topics covered include the production of light, its measurement and control, principles of optics and the formation of images, the basic chemistry of black and white and color processes, film structure and characteristics, filter characteristics, lasers, and holography. Laboratory fee.

**PHYSICS (PHY) 111 (4)**

INTRODUCTORY GENERAL PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Two years of high school algebra, including trigonometry, or the equivalent. This course is for pre-dental, biology, pre-medical, pre-pharmacy, and pre-architecture majors and other students who need a two-semester technical course in physics. Mechanics and heat are studied. Laboratory fee.

**PHYSICS (PHY) 112 (4)**

INTRODUCTORY GENERAL PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Physics 111. This course is a continuation of Physics 111. Electricity, magnetism, light, and sound are studied. Laboratory fee.

**PHYSICS (PHY) 117 (4)**

CONCEPTS IN PHYSICS (3 LEC., 3 LAB.)

This course is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on classical mechanics and thermodynamics. Historical developments and their impact on daily life are included. The principle of energy conservation is stressed, and current problems of world-wide energy production are examined. Laboratory fee.

**PHYSICS (PHY) 118 (4)**

CONCEPTS IN PHYSICS (3 LEC., 3 LAB.)

This is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on modern developments in physics. Topics include acoustics, electricity and magnetism, light and the electromagnetic spectrum, atomic physics, and relativity. Laboratory fee.

**PHYSICS (PHY) 131 (4)**

APPLIED PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Mathematics 195 or concurrent enrollment in Mathematics 195. This course is primarily for students in technical programs. The properties of matter, mechanics, and heat are introduced. Emphasis is on uses and problem-solving. Laboratory fee.

**PHYSICS (PHY) 201 (4)**

GENERAL PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Credit or concurrent enrollment in Mathematics 124. This course is designed primarily for physics, chemistry, mathematics, and engineering majors. The principles and applications of mechanics, wave motion, and sound are studied. Emphasis is on fundamental concepts, problem-solving, notation, and units. The laboratory includes a one-hour problem session. Laboratory fee.

**PHYSICS (PHY) 202 (4)**

GENERAL PHYSICS (3 LEC., 3 LAB.)

Prerequisites: Physics 201 and credit or concurrent enrollment in Mathematics 225. This course presents the principles and applications of heat, electricity, magnetism, and optics. Emphasis is on fundamental concepts, problem solving, notation and units. The laboratory includes a one-hour problem session. Laboratory fee.

**POSTAL SERVICE****ADMINISTRATION (PSA) 110 (3)**

INTRODUCTION TO POSTAL SERVICE (3 LEC.)

This survey course of the Postal Service, taking a historical view, will depict and compare the private, corporate, and governmental agencies which have been responsible for mail service throughout the world. The current U.S. Postal Organization, mandated by public law, is studied. Also included in the course are discussions of postal philosophies, policies, procedures, rules and regulations, and the history of the Postal Inspection Service.

**POSTAL SERVICE****ADMINISTRATION (PSA) 120 (3)**

MAIL PROCESSING (3 LEC.)

Through discussion of mail processing and transportation procedures of the U.S. Postal Service, this course will provide the student with an in-depth view of revenue determination and flow characteristics involved in movement of mail from sender to recipient. The course will also include a study of the systems devised to attain maximum efficiency in mail handling with a minimum of errors.



**POSTAL SERVICE  
ADMINISTRATION (PSA) 122 (3)**  
CUSTOMER SERVICES (3 LEC.)

This course provides functional information about mail delivery and collection systems and in-depth information about services provided for postal customers. Included in the course are rural and city delivery systems, marketing of postal products and services, and techniques of effective public relations.

**POSTAL SERVICE  
ADMINISTRATION (PSA) 125 (3)**  
POSTAL ECONOMICS AND  
FINANCE (3 LEC.)

This course explores how postal revenues are established, controlled, received, processed and used to defray operating costs. With emphasis on planning, organization, cost control, budget preparation, cost benefit analysis and related office services functions, the course will deal in depth with control techniques and accountability required of the Postal Service.

**POSTAL SERVICE  
ADMINISTRATION (PSA) 210 (3)**  
LABOR RELATIONS (3 LEC.)

This course will provide an overview of the laws and practices leading to the current labor situation in the Postal Service. Discussion will focus on development of labor unions, problems and/or issues in the Postal Service, national and local agreements, bargaining units, grievance procedures, disciplinary action procedures and the relationships to the national labor relations board.

**POSTAL SERVICE  
ADMINISTRATION (PSA) 212 (3)**  
EMPLOYEE SERVICES (3 LEC.)

This course details the actual functions of the employee relations office with a view of the services provided for Postal Service employees. Among the topics included are policies and practices concerning selection, placement, training, and promotion of employees, the Equal Employment Opportunity Act, programs for alcoholic recovery, insurance and retirement benefits, awards programs, salary schedules, and safety and health rules.

**POSTAL SERVICE  
ADMINISTRATION (PSA) 214 (3)**  
POSTAL PROBLEMS ANALYSIS (3 LEC.)

This course provides opportunity for practical application of Postal Service and management theories. Students must use system analysis, problem solving grids and other tools of management decision-making to assess a stated Postal Service problem and to determine appropriate solution(s).

**PSYCHOLOGY (PSY) 103 (3)**  
HUMAN SEXUALITY (3 LEC.)

Students may register for either Psychology 103 or Sociology 103 but receive credit for only one of the two. Topics include physiological, psychological, and sociological aspects of human sexuality.

**PSYCHOLOGY (PSY) 105 (3)**  
INTRODUCTION TO  
PSYCHOLOGY (3 LEC.)

Principles of human behavior and problems of human experience are presented. Topics include heredity and environment, the nervous system, motivation, learning, emotions, thinking, and intelligence. (This course is offered on campus and may be offered via television.)

**PSYCHOLOGY (PSY) 131 (3)**  
HUMAN RELATIONS (3 LEC.)

Psychological principles are applied to human relations problems in business and industry. Topics include group dynamics and adjustment factors for employment and advancement.

**PSYCHOLOGY (PSY) 201 (3)**  
DEVELOPMENTAL PSYCHOLOGY (3 LEC.)

Prerequisite: Psychology 105. This course is a study of human growth, development, and behavior. Emphasis is on psychological changes during life. Processes of life from prenatal beginnings through adulthood and aging are included. (This course is offered on campus and may be offered via television.)

**PSYCHOLOGY (PSY) 202 (3)**  
APPLIED PSYCHOLOGY (3 LEC.)

Prerequisite: Psychology 105. Psychological facts and principles are applied to problems and activities of life. Emphasis is on observing, recording, and modifying human behavior. Some off-campus work may be required.

**PSYCHOLOGY (PSY) 205 (3)**  
PSYCHOLOGY OF PERSONALITY (3 LEC.)  
Prerequisite: Psychology 105. Important factors of successful human adjustment such as child parent relationships, adolescence, anxiety states, defense mechanisms, and psychotherapeutic concepts are considered. Methods of personality measurement are also included.

**PSYCHOLOGY (PSY) 207 (3)**  
SOCIAL PSYCHOLOGY (3 LEC.)

Prerequisite: Psychology 105 or Sociology 101. Students may register for either Psychology 207 or Sociology 207 but may receive credit for only one. Theories of individual behavior in the social environment are surveyed. Topics include the socio-psychological process, attitude formation and change, interpersonal relations, and group processes.

**PSYCHOLOGY (PSY) 210 (3)**  
SELECTED TOPICS IN  
PSYCHOLOGY (3 LEC.)

Prerequisite: Psychology 105. An elective course designed to deal with specific topics in psychology. Examples of topics might include "adult development," "adolescent psychology," and "behavioral research." Course may be repeated once for credit.

**QUALITY CONTROL  
TECHNOLOGY (QCT) 122 (3)**  
DIMENSIONAL MEASUREMENT (2 LEC., 2 LAB.)

This course provides an opportunity to obtain a practical and theoretical understanding of many types of mechanical and optical measuring devices which are used in dimensional inspection. Laboratory fee.

**READING (RD) 101 (3)**  
EFFECTIVE COLLEGE READING (3 LEC.)

Comprehension techniques for reading fiction and non-fiction are presented. Critical reading skills are addressed. Analysis, critique, and evaluation of written material are included. Reading comprehension and flexibility of reading rate are stressed. Advanced learning techniques are developed in listening, note-taking, underlining, concentrating, and reading in specialized academic areas.

**READING (RD) 102 (3)**  
SPEED READING  
AND LEARNING (3 LEC.)

Reading and learning skills are addressed. Speed reading techniques and comprehension are emphasized. Learning and memory skills are also covered.

**RELIGION (REL) 101 (3)**  
RELIGION IN AMERICAN  
CULTURE (3 LEC.)

This course examines the nature of religion in America. It covers important influences from the past and characteristics of current religious groups and movements. Emphasis is on understanding the role of religion in American life.

**RELIGION (REL) 201 (3)**  
MAJOR WORLD RELIGIONS (3 LEC.)

This course surveys the major world religions. Hinduism, Buddhism, Judaism, Islam, and Christianity are included. The history of religions is covered, but the major emphasis is on current beliefs. Other topics may also be included, such as the nature of religion, tribal religion, and alternatives to religion.

**SOCIAL SCIENCE (SS) 131 (3)**  
AMERICAN CIVILIZATION (3 LEC.)

Theories and institutions of modern society are introduced. Psychological, historical, sociocultural, political, and

economic factors are considered. The nature of the human being and the relationships of the individual are examined. Emphasis is on the national, state, and local experiences which affect daily life.

**SOCIAL SCIENCES (SS) 132 (3)**  
AMERICAN CIVILIZATION (3 LEC.)

Prerequisite: Social Science 131. Topical studies are made of the theories and institutions of modern society. Psychological, historical, sociocultural, political, and economic factors are all considered. Emphasis is on analyzing and applying theory to life experiences.

**SOCIOLOGY (SOC) 101 (3)**  
INTRODUCTION TO SOCIOLOGY (3 LEC.)

This course is a study of the nature of society and the foundations of group life. Topics include institutions, social change, processes, and problems.

**SOCIOLOGY (SOC) 102 (3)**  
SOCIAL PROBLEMS (3 LEC.)

This course is a study of social problems which typically include: crime, poverty, minorities, deviancy, population, and health care. Specific topics may vary from semester to semester to address contemporary concerns.

**SOCIOLOGY (SOC) 103 (3)**  
HUMAN SEXUALITY (3 LEC.)

Students may register for either Psychology 103 or Sociology 103 but receive credit for only one of the two. Topics include physiological, psychological, and sociological aspects of human sexuality.

**SOCIOLOGY (SOC) 203 (3)**  
MARRIAGE AND FAMILY (3 LEC.)

Prerequisite: Sociology 101 recommended. Courtship patterns and marriage are analyzed. Family forms, relationships, and functions are included. Sociocultural differences in family behavior are also included.

**SOCIOLOGY (SOC) 204 (3)**  
AMERICAN MINORITIES (3 LEC.)

Prerequisite: Sociology 101 or 6 hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one. The principal minority groups in American society are the focus of this course. The sociological significance and historic contributions of the groups are presented. Emphasis is on current problems of intergroup relations, social movements, and related social changes.

**SOCIOLOGY (SOC) 207 (3)**  
SOCIAL PSYCHOLOGY (3 LEC.)

Students may register for either Psychology 207 or Sociology 207 but

may receive credit for one. Theories of individual behavior in the social environment are surveyed. Topics include the socio-psychological process, attitude formation and change, interpersonal relations, and group processes.

**SOCIOLOGY (SOC) 209 (3)**  
SELECTED TOPICS (3 LEC.)

Prerequisite: Sociology 101 or the consent of the instructor. This is an elective course designed to deal with specific topics in sociology. Examples of topics might be: "urban sociology," "women in society," or "living with divorce." As the topics change, this course may be repeated once for credit.

**SPANISH (SPA) 101 (4)**  
BEGINNING SPANISH (3 LEC., 2 LAB.)

The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee.

**SPANISH (SPA) 102 (4)**  
BEGINNING SPANISH (3 LEC., 2 LAB.)

Prerequisite: Spanish 101 or the equivalent. This course is a continuation of Spanish 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee.

**SPANISH (SPA) 201 (3)**  
INTERMEDIATE SPANISH (3 LEC.)

Prerequisite: Spanish 102 or the equivalent or the consent of the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed.

**SPANISH (SPA) 202 (3)**  
INTERMEDIATE SPANISH (3 LEC.)

Prerequisite: Spanish 201 or the equivalent. This course is a continuation of Spanish 201. Contemporary literature and composition are studied.

**SPANISH (SPA) 203 (3)**  
INTRODUCTION TO SPANISH LITERATURE (3 LEC.)

Prerequisite: Spanish 202 or the equivalent or the consent of the instructor. This course is an introduction to Spanish literature. It includes readings in Spanish literature, history, culture, art, and civilization.

**SPANISH (SPA) 204 (3)**  
INTRODUCTION TO SPANISH LITERATURE (3 LEC.)

Prerequisite: Spanish 202 or the equivalent or the consent of the instructor. This course is a continuation of Spanish 203. It includes readings in Spanish literature, history, culture, art, and civilization.

**SPEECH (SPE) 100 (1)**  
SPEECH LABORATORY (3 LAB.)

This course focuses on preparing speeches, reading dialogue from literature, and debating propositions. Presentations are made throughout the community. This course may be repeated for credit each semester.

**SPEECH (SPE) 105 (3)**  
FUNDAMENTALS OF PUBLIC SPEAKING (3 LEC.)

Public speaking is introduced. Topics include the principles of reasoning, audience analysis, collection of materials, and outlining. Emphasis is on giving well prepared speeches.

**SPEECH (SPE) 109 (3)**  
VOICE AND ARTICULATION (3 LEC.)

Students may register for either Speech 109 or Theatre 109 but may receive credit for only one of the two. The mechanics of speech are studied. Emphasis is on improving voice and pronunciation.

**SPEECH (SPE) 110 (1)**  
FORENSIC WORKSHOP (2 LAB.)

This course focuses on preparing speeches, readings, and debate propositions. Presentations are made in competition and before select audiences. This course may be repeated for credit.

**SPEECH (SPE) 201 (1)**  
FORENSIC WORKSHOP (2 LAB.)

This course focuses on preparing speeches, readings, and debate propositions. Presentations are made in competition and before select audiences. This course may be repeated for credit.

**SPEECH (SPE) 205 (3)**  
DISCUSSION AND DEBATE (3 LEC.)

Public discussion and argumentation are studied. Both theories and techniques are covered. Emphasis is on evaluation, analysis, and logical thinking.

**SPEECH (SPE) 206 (3)**  
ORAL INTERPRETATION (3 LEC.)

Techniques of analyzing various types of literature are examined. Practice is provided in preparing and presenting selections orally. Emphasis is on individual improvement.

**SPEECH (SPE) 208 (3)**  
GROUP INTERPRETATION (3 LEC.)

Prerequisite: Speech 105 and 206. Various types of literature are studied for group presentation. Emphasis is on selecting, cutting and arranging prose and poetry, and applying reader's theatre techniques to the group performance of the literature. Although not an acting class, practical experience in sharing selections from

fiction and non-fiction with audiences will be offered.

**THEATRE (THE) 100 (1)**  
REHEARSAL AND PERFORMANCE (4 LAB.)

Prerequisite: To enroll in this course, a student must be accepted as a member of the cast or crew of a major production. Participation in the class will include the rehearsal and performance of the current theatrical presentation of the division. This course may be repeated for credit.

**THEATRE (THE) 101 (3)**  
INTRODUCTION TO THE THEATRE (3 LEC.)

The various aspects of theatre are surveyed. Topics include plays, playwrights, directing, acting, theatres, artists, and technicians.

**THEATRE (THE) 102 (3)**  
CONTEMPORARY THEATRE (3 LEC.)

This course is a study of the modern theatre and cinema as art forms. The historical background and traditions of each form are included. Emphasis is on understanding the social, cultural, and aesthetic significance of each form. A number of modern plays are read, and selected films are viewed.

**THEATRE (THE) 103 (3)**  
STAGECRAFT I (2 LEC., 3 LAB.)

The technical aspects of play production are studied. Topics include set design and construction, stage lighting, make-up, costuming, and related areas.

**THEATRE (THE) 104 (3)**  
STAGECRAFT II (2 LEC., 3 LAB.)

Prerequisite: Theatre 103 or the consent of the instructor. This course is a continuation of theatre 103. Emphasis is on individual projects in set and lighting design and construction. The technical aspects of play production are explored further.

**THEATRE (THE) 105 (3)**  
MAKE-UP FOR THE STAGE (3 LEC.)

The craft of make-up is explored. Both theory and practice are included. Laboratory fee.

**THEATRE (THE) 106 (3)**  
ACTING I (2 LEC., 3 LAB.)

The theory of acting and various exercises are presented. Body control, voice, pantomime, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied for stage presentation.

**THEATRE (THE) 107 (3)**  
ACTING II (2 LEC., 3 LAB.)

Prerequisite: Theatre 106 or the consent of the instructor. This course is a continuation of Theatre 106.

Emphasis is on complex characterization, ensemble acting, stylized acting, and acting in period plays.

**THEATRE (THE) 108 (3)**  
MOVEMENT FOR THE STAGE (2 LEC., 3 LAB.)

Movement is studied as both a pure form and as a part of the theatre arts. It is also presented as a technique to control balance, rhythm, strength, and flexibility. Movement in all the theatrical forms and in the development of characterization is explored. This course may be repeated for credit.

**THEATRE (THE) 109 (3)**  
VOICE AND ARTICULATION (3 LEC.)

Students may register for either Speech 109 or Theatre 109 but may receive credit for only one of the two. Emphasis is on improving voice and pronunciation.

**THEATRE (THE) 110 (3)**  
HISTORY OF THEATRE I (3 LEC.)

Theatre is surveyed from its beginning through the 16th century. The theatre is studied in each period as a part of the total culture of the period.

**THEATRE (THE) 111 (3)**  
HISTORY OF THEATRE II (3 LEC.)

Theatre is surveyed from the 17th century through the 20th century. The theatre is studied in each as a part of the total culture of the period.

**THEATRE (THE) 112 (3)**  
BEGINNING DANCE TECHNIQUE IN THEATRE (2 LEC., 3 LAB.)

Basic movements of the dance are explored. Emphasis is on swing movements, circular motion, fall and recovery, contraction and release, and contrast of literal and abstract movements. Body balance, manipulation of trunk and limbs, and the rhythmic flow of physical energy are developed.

**THEATRE (THE) 113 (3)**  
INTERMEDIATE DANCE (2 LEC., 3 LAB.)

Prerequisite: Theatre 112 or the consent of the instructor. Various aspects of dance are surveyed. Topics include the role of dance in total theatre, the evolution of dance styles, and the jazz style. Emphasis is on the flow of movement, body placement, dynamic intensity, level, focus, and direction.

**THEATRE (THE) 115 (2)**  
MIME (1 LEC., 2 LAB.)

Prerequisite: Theatre 108. Mime is studied. Both the expressive significance and techniques of mime are included.

**THEATRE (THE) 199 (1)**  
DEMONSTRATION LAB (1 LAB.)

This course provides practice before a

live audience of theory learned in theatre classes. Scenes studied in various drama classes are used to show contrast and different perspectives. This course may be repeated for credit.

**THEATRE (THE) 205 (3)**  
SCENE STUDY I (2 LEC., 3 LAB.)

Prerequisite: Theatre 106 and 107. This course is a continuation of Theatre 107. Emphasis is on developing dramatic action through detailed study of the script. Students deal with stylistic problems presented by the staging of period plays and the development of realism. Rehearsals are used to prepare for scene work.

**THEATRE (THE) 207 (3)**  
SCENE STUDY II (2 LEC., 3 LAB.)

Prerequisite: Theatre 205. This course is a continuation of Theatre 205. Emphasis is on individual needs of the performer. Rehearsals are used to prepare for scene work.

**THEATRE (THE) 208 (3)**  
INTRODUCTION TO TECHNICAL DRAWING (2 LEC., 3 LAB.)

Basic techniques of drafting are studied. Isometrics, orthographic projections, and other standard procedures are included. The emphasis is on theatrical drafting, including groundplans, vertical sections, construction elevations, and spider perspective.

**THEATRE (THE) 209 (3)**  
LIGHTING DESIGN (2 LEC., 3 LAB.)

Prerequisite: Theatre 103 and 104. The design and techniques of lighting are covered. Practical experience in departmental productions is required for one semester.

**THEATRE (THE) 235 (3)**  
COSTUME HISTORY (3 LEC.)

Fashion costume and social customs are examined. The Egyptian, Greek, Roman, Gothic, Elizabethan, Victorian, and Modern periods are included.

**WELDING (WE) 111 (2)**  
OXYFUEL I (60 CONTACT HOURS)

This course gives both theory and practice in basic tools, equipment and processes used in welding and brazing gauge materials. Lab work includes preparation and performance of welded and brazed joints. Laboratory fee.

**WELDING (WE) 112 (2)**  
OXYFUEL II (60 CONTACT HOURS)

Prerequisite: Welding 111. This course gives both theory and practice in the basic tools, equipment and procedures used in layout, cutting, shaping, forming and the heat treating of metals. Lab work includes

the selection and use of fuel gases for heat treating and the set-up and usage of semi-automatic and manual cutting equipment. Laboratory fee.

**WELDING (WE) 113 (2)**

**SHIELDED METAL ARC WELDING I (60 CONTACT HOURS)**

This course gives both theory and practice in the identification and usage of shielded metal arc welding electrodes. Laboratory work includes the use of E60 and E70 series including low hydrogen electrodes primarily in the flat and horizontal position. Laboratory fee.

**WELDING (WE) 114 (2)**

**SHIELDED METAL ARC WELDING II (60 CONTACT HOURS)**

Prerequisite: Welding 113. This course includes both theory and laboratory work, emphasizing the production and properties of mild steel alloys. Arc welding equipment set-up and operation are also included. Laboratory work will include the use of E60 and E70 series electrodes primarily in the vertical and overhead position. Laboratory fee.

**WELDING (WE) 115 (4)**

**SHIELDED METAL ARC WELDING III (120 CONTACT HOURS)**

Prerequisite: Welding 114. This course gives both the theory and practice in code quality welding. Laboratory work includes passing standard test according to the American Welding Society and American Society of Mechanical Engineers for certifying procedures for 3/16" - 3/4" thickness range material in all positions. Laboratory fee.

**WELDING (WE) 116 (4)**

**SHIELDED METAL ARC WELDING IV (120 CONTACT HOURS)**

Prerequisite: Welding 115. This course is designed to introduce the basis of shielded metal arc welding of pipe. Lab work includes welding 3" through 10" schedule 40 mild steel pipe. The vertical, horizontal rolled and fixed using E60 and E70 series electrodes are included. Laboratory fee.

**WELDING (WE) 117 (3)**

**GENERAL METAL LAYOUT (90 CONTACT HOURS)**

Prerequisite: Drafting 182 or equivalent. This course gives both theory and practice in blueprint reading, welding symbols, layout work and fabrication techniques of metal weldments. Lab work consists of developing shop drawings and fabrication of designed structures. Laboratory fee.

**WELDING (WE) 118 (4)**

**WELDING INSPECTION AND QUALITY CONTROL (120 CONTACT HOURS)**

Prerequisites: Welding 117 and six credit hours of welding lab courses or equivalent. This course is both a theory and practical application of welding codes, processes, testing procedures, testing equipment and weld discontinuities. Lab work emphasis is on inspection and qualification of welds and welding procedures.

**WELDING (WE) 211 (2)**

**GAS TUNGSTEN ARC WELDING I (60 CONTACT HOURS)**

This course gives both theory and practice in the set-up and use of gas-tungsten arc welding of plate. Laboratory work will include setting up and using 18 gauge through 3/8" thick mild steel, stainless and aluminum. Welds will be made primarily in the flat and horizontal positions. Laboratory fee.

**WELDING (WE) 212 (2)**

**GAS TUNGSTEN ARC WELDING II (60 CONTACT HOURS)**

Prerequisite: Welding 211 or equivalent. This course gives both theory and practice in the set-up and use of gas tungsten arc welding of pipe. Lab work includes the welding of thin wall tubing and schedule 40 pipe. Welding is primarily in the vertical, horizontal rolled and horizontal fixed positions. Laboratory fee.

**WELDING (WE) 213 (4)**

**GAS TUNGSTEN ARC WELDING III (120 CONTACT HOURS)**

Prerequisite: Welding 212 or equivalent. This is an advanced theory and skills course in the use of gas tungsten arc welding of plate and pipe. Lab work will include passing the standard qualification test in a variety of metals in all positions. Laboratory fee.

**WELDING (WE) 214 (2)**

**GAS METAL ARC WELDING I (60 CONTACT HOURS)**

This course gives both theory and practice in the set-up and use of gas metal arc welding processes of plate. Lab work will be on setting up and using gas metal arc welding equipment in welding 18 gauge 3/8" thick mild steel, stainless and aluminum, primarily in the flat and horizontal position. Laboratory fee.

**WELDING (WE) 215 (2)**

**GAS METAL ARC WELDING II (60 CONTACT HOURS)**

Prerequisite: Welding 214. This course gives both theory and practice in the set-up and use of gas metal arc

welding processes of pipe. Lab work includes the welding of schedule 40 mild steel pipe in the vertical, horizontal rolled and fixed positions. Laboratory fee.

**WELDING (WE) 216 (4)**

**GAS METAL ARC WELDING III (120 CONTACT HOURS)**

Prerequisite: Welding 215. This is an advanced theory and skills course in the use of gas metal arc welding of plate and pipe. Lab work will be on passing the standard qualification test in plate and pipe on plate and pipe in a variety of metals and thickness ranges in all positions. Laboratory fee.

**WELDING (WE) 217 (3)**

**BASIC WELDING METALLURGY (90 CONTACT HOURS)**

This is a theory type course designed to assist those students in welding and related industries to refresh and extend their knowledge of the behavior of the various fabricating metals during welding. The effects of the joining processes and procedures on the fabrication and service performance of weldments are also considered. Laboratory fee.

**WELDING (WE) 218 (3)**

**APPLIED WELDING METALLURGY (90 CONTACT HOURS)**

Prerequisite: Welding 217 and six credit hours of welding lab courses. This course is designed to assist the student in improving communication skills with welding engineers and metallurgists. The course includes a study of welding processes and their relationship to and effect upon metals and why they can or cannot be used for certain applications; the theory of heat treating and its many uses; the value of preheat, interpass temperature, and post-heat in welding procedures. This course should increase the students knowledge of what metals are made of and why they are used for specific industrial applications; to strengthen the knowledge and understanding of the grain structure of metals and the effect that welding processes have on them. Laboratory fee.

**WELDING (WE) 219 (3)**

**WELDING DESIGN (90 CONTACT HOURS)**

Prerequisites: Welding 117, and six credit hours of welding lab courses or equivalent. Concepts in designing products for welding, joint design and selection, weld size determination, welding costs, codes and applications in welding. A design project is chosen and carried to completion using the design team concept. Laboratory fee.

**WELDING (WE) 220 (2)**

SPECIAL WELDING APPLICATION I (60  
CONTACT HOURS)

This is an advanced skills development course designed to allow the student to program his own specialization area course objectives under instructional supervision. This will allow a student to upgrade his present skills development level in order to meet employment reclassification requirements of a selected potential employer. This course is open only to those students in advanced standing or who are presently employed and in need of additional skill development. This course may be repeated for credit. Laboratory fee.

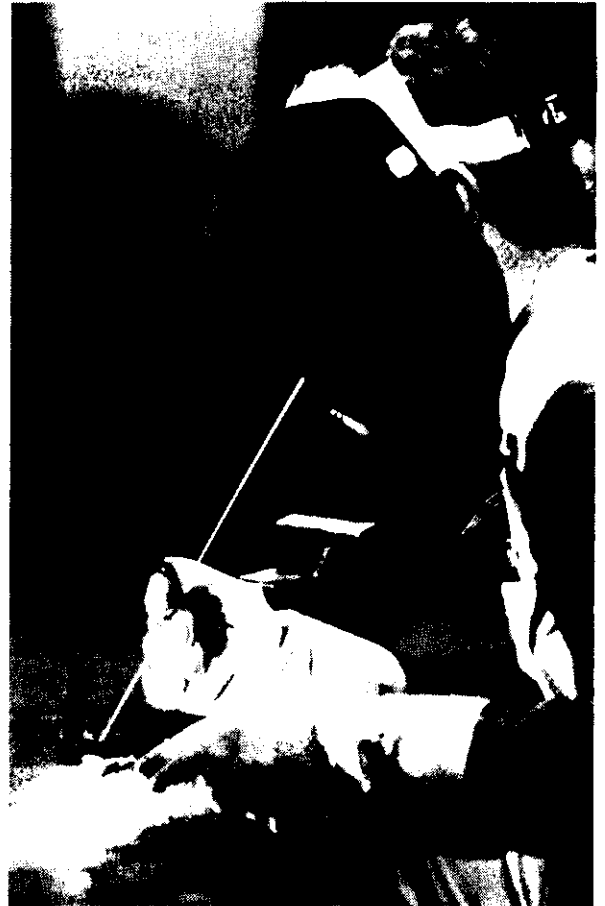
**WELDING (WE)****COOPERATIVE WORK EXPERIENCE**

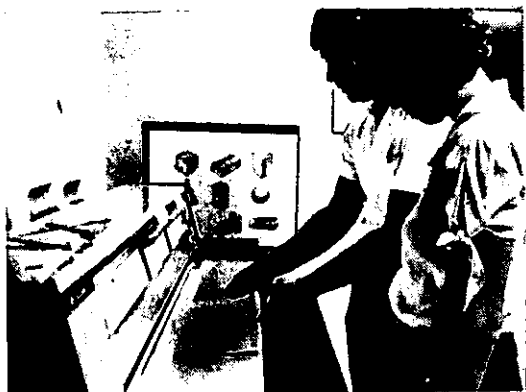
701, 711, 801, 811 (1)

702, 712, 802, 812 (2)

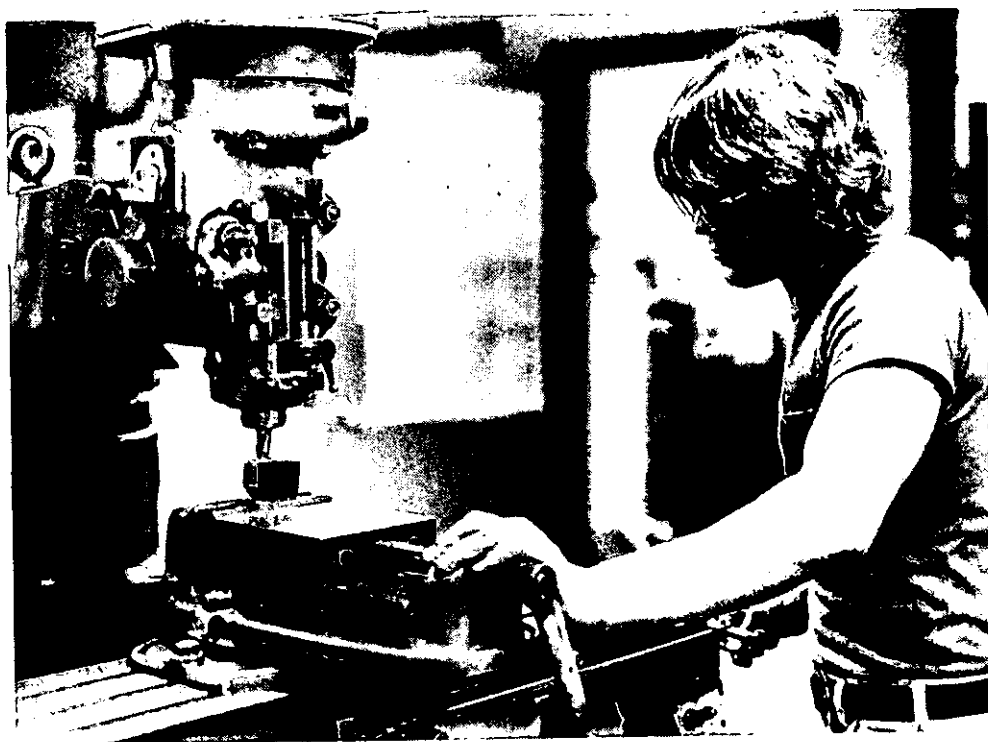
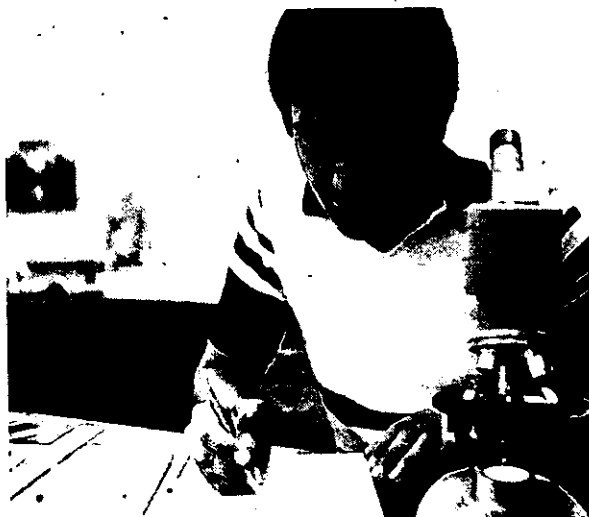
703, 713, 803, 813 (3)

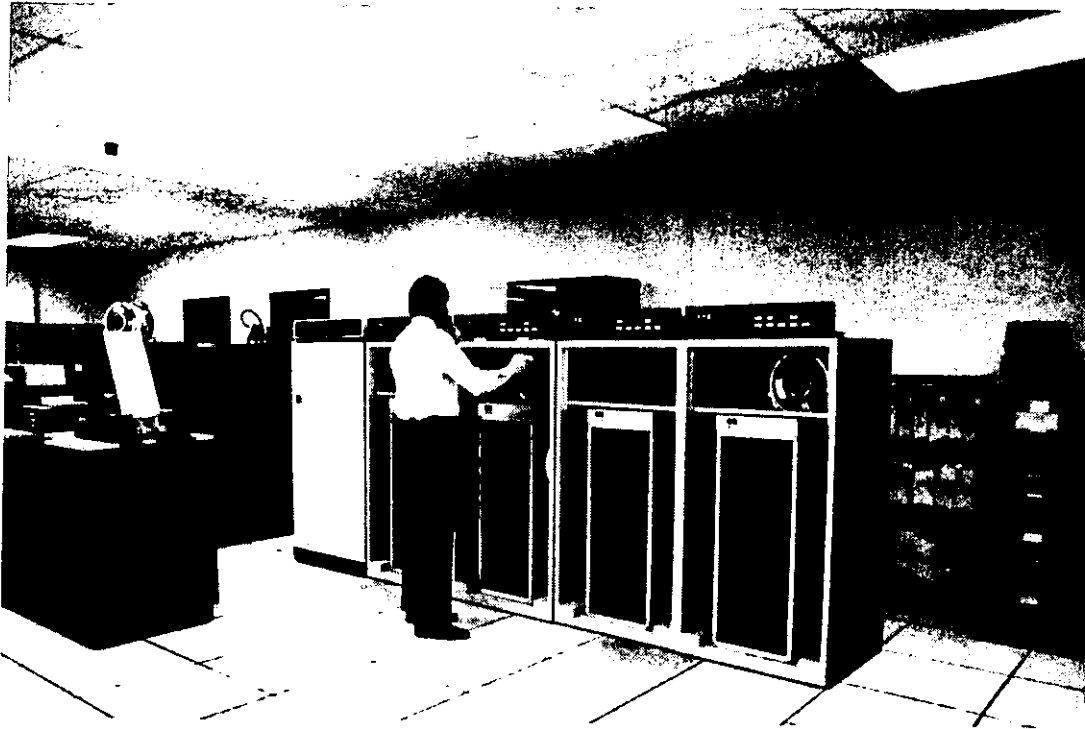
704, 714, 804, 814 (4)





## Technical/Occupational Programs







## RECIPROCAL TUITION AGREEMENT

### DCCCD PROGRAMS

The following programs offered by Dallas County Community College District may be taken by Tarrant County residents at in-county tuition rates:

Program	Campus
Advertising Art	BHC
Animal Medical Technology	CVC
Apparel Design	ECC
Aviation Technology	MVC
Air Cargo	
Air Traffic Control	
Aircraft Dispatcher	
Airline Marketing	
Career Pilot	
Fixed Base Operations	
Avionics	MVC
Automotive Parts	BHC
Automotive Machinist	BHC
Building Trades	NLC
Carpentry	
Electrical	
Commercial Design & Advertising	CVC
Commercial Music	CVC
Construction Management	RLC
Diesel Mechanics	NLC
Distribution Technology	NLC
Engineering Technology	RLC
Food Service Operations	ECC
Graphic Communications	EFC
Horology	MVC
Hotel/Motel Operations	ECC
Human Services	EFC
Interior Design	ECC
Motorcycle Mechanics	CVC
Optical Technology	NLC
Outboard Marine	
Engine Mechanics	CVC
Pattern Design	ECC
Purchasing Management	EFC, NLC
Retail Management	BHC, CVC
Solar Energy Technology	NLC
Vocational Nursing	ECC

### TCJC PROGRAMS

The following programs offered by Tarrant County Junior College may be taken by Dallas County residents at in-county tuition rates:

Program	Campus*
Agribusiness	NW
Cast Metals Technology	NE
Civil/Construction Technology	NE
Dental Hygiene	NE
Emergency Medical Technology	NE
Industrial Supervision	S
Long Term	
Health Care Administration	NE
Media Technology	NE
Medical Records Technology	NE
Nondestructive	
Evaluation Technology	S
Physical Therapist Assistant	NE
Property Tax Appraisal	NE
Radio-TV Repair	S

\*NE — Northeast Campus, NW — Northwest Campus, S — South Campus.

### STUDENTS CONSIDERING TRANSFER TO A FOUR-YEAR INSTITUTION

The following programs have been designated to provide marketable skills in varied occupations. All courses in these technical/occupational programs are credit courses leading to an associate degree. Some courses are transferable to four-year institutions. Students who plan to transfer are advised to consult with a counselor to develop a technical/occupational course plan which best meets the degree requirements of the chosen four-year college or university.

## FLEXIBLE ENTRY CLASSES

For the convenience of those students who are not able to register during the regular registration period, many of the courses offered at Mountain View College are available on a flexible entry basis. "Flexible Entry" simply means that the courses set up on this basis can be entered or begun at times other than the normal semester registration times. Students may register for courses designated flexible entry in the Registrar's Office the first Monday of most months during the academic year. Approval by the instructor of the course is required. Courses from the following programs are included in the flexible entry registration arrangement:

- Aviation Technology
- Blueprint Reading
- Business
- Cooperative Work Experience
- Drafting & Design Technology
- Horology (Clock & Watch Repair)
- Learning Skills Center Courses
- Machine Shop
- Office Careers
- Physical Education
- Welding Technology

## COOPERATIVE WORK EXPERIENCE

The Cooperative Work Experience program at Mountain View College acts as a bridge between classroom instruction and on-the-job experience. Students enrolled in the Cooperative Work Experience program are able to earn college credit, and get valuable on-the-job training while earning a salary. The Co-op program is coordinated with many of the Technical/Occupational programs offered including:

- Accounting Associate
- Electronics/Avionics Technology
- Data Processing
- Drafting & Design Technology
- Machine Shop
- Office Careers
- Welding Technology

Students interested in more information on the Cooperative Work Experience program should contact Jim Kavalier at 333-8756 or go by the Cooperative Work Experience office, W235.

## DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

Career Education Programs	BHC	CVC	EFC	ECC	MVC	NLC	RLC		BHC	CVC	EFC	ECC	MVC	NLC	RLC
Accounting Associate	x	x	x	x	x	x	x		Fire Protection Technology			x			
Advertising Art	x								Food Service			x			
Air Conditioning & Refrigeration		x	x			x			Dietetic Assistant & Technician			x			
Animal Medical Technology		x							Food Service Operations			x			
Apparel Design				x					School Food Service			x			
Architectural Technology				x					Graphic Arts/Communications		x				
Architectural Drafting				x					Horology		x				
Auto Body Technology	x		x						Hotel-Motel Operations			x			
Automotive Parts, Sales & Service	x								Interior Design			x			
Automotive Technology Apprenticeship		x							Legal Assistant			x			
Automotive Technology	x	x	x						Machine Parts Inspection				x		
Aviation Maintenance Technology					x				Machine Shop				x		
Aviation Technology					x				Major Appliance Repair		x				
Air Cargo Transport					x				Management Careers	x	x	x	x	x	x
Aircraft Dispatcher					x				Administrative Management	x	x	x	x	x	x
Airline Marketing					x				Mid-Management	x	x	x	x	x	x
Air Traffic Control					x				Purchasing Management			x		x	
Career Pilot					x				Sales, Marketing & Retail Management	x	x				
Fixed Base Operations/Airport Management					x				Small Business Management		x		x	x	x
Banking and Finance							x		Medical			x			
Banking							x		Associate Degree Nursing	x*		x**	x	x**	x**
Credit & Financial Management							x		Dental Assisting Technology			x			
Credit Union							x		Medical Assisting Technology			x			
Savings & Loan							x		Medical Laboratory Technology			x			
Building Trades						x			Medical Transcription			x			
Carpentry—Residential & Commercial						x			Radiography Technology			x			
Electrical						x			Respiratory Therapy Technology			x			
Child Development Associate	x		x						Surgical Technology			x			
CDA Training Certificate	x		x						Vocational Nursing			x*		x*	
Special Child	x		x						Motorcycle Mechanics		x				
Administrative	x		x						Office Careers	x	x	x	x	x	x
Infant-Toddler	x		x						Administrative Assistant	x	x	x	x	x	x
Commercial Music		x							General Office Certificate	x	x	x	x	x	x
Arranger/Composer/Copyist		x							Insurance Certificate						x
Music Retailing		x							Legal Secretary	x	x	x	x	x	x
Recording Technology		x							Professional Secretary	x	x	x	x	x	x
Construction Management & Technology							x		Records Management	x	x	x			
Data Processing									Optical Technology					x	
Information Systems				x					Ornamental Horticulture Technology						x
Key Entry/Data Control				x					Florist & Greenhouse Florist						x
Operator				x					Landscape Nursery & Gardener						x
Programmer	x	x	x	x	x	x	x		Outboard Marine Engine Mechanics		x				
Small Computer Systems Information Specialist				x					Pattern Design			x			
Diesel Mechanics						x			Precision Optics Technology					x	
Distribution Technology						x			Police Science Technology			x			
Drafting & Design Technology			x	x	x				Postal Service Administration				x		
Electronics Design Option			x						Real Estate					x	x
Educational Paraprofessionals/Assistant							x		Retail Distribution and Marketing	x	x				
Electronics Technology			x		x				Commercial Design & Advertising		x				
Avionics					x				Fashion Marketing	x	x				
Digital Electronics			x						Small Engine Mechanics		x				
Engineering Technology							x		Social Work Associate			x			
Electric Power							x		Solar Energy Technology					x	
Electro-Mechanical							x		Training Paraprofessionals for the Deaf			x			
Fluid Power							x		Transportation Technology			x			
Manufacturing Engineering							x		Welding Technology			x		x	
Quality Control							x								

\* Programs are offered at the designated colleges through El Centro College.

\*\* Second Year courses are offered at the designated colleges through El Centro College.

BHC — Brookhaven College    ECC — El Centro College    NLC — North Lake College  
 CVC — Cedar Valley College    MVC — Mountain View College    RLC — Richland College  
 EFC — Eastfield College

## ACCOUNTING ASSOCIATE

(Associate Degree)

The Accounting Associate two-year program is designed to prepare a student for a career as a junior accountant in business, industry and government. Emphasis will be placed on internal accounting procedures and generally accepted accounting principles.

The Associate in Applied Arts and Sciences Degree is awarded for successful completion of at least 63 credit hours as outlined below. Students desiring a less comprehensive program that emphasizes bookkeeping procedures and practices should consider the General Office Certificate with elective emphasis on accounting careers. The General Office Certificate is available in the Office Careers Program.

		CREDIT HOURS
<b>SEMESTER I</b>		
ACC 201	Principles of Accounting I	3
BUS 105	Introduction to Business	3
COM 131	Applied Composition and Speech or*	3
ENG 101	Composition and Expository Reading	
MTH 130	Business Mathematics or	3
MTH 111	Mathematics for Business and Economics	
OFC 160	Office Calculating Machines	3
		<u>15</u>
<b>SEMESTER II</b>		
ACC 202	Principles of Accounting II	3
COM 132	Applied Composition and Speech or*	3
ENG 102	Composition and Literature	
CS 175	Introduction to Computer Science	3
MGT 136	Principles of Management	3
† OFC 172	Beginning Typing	3
		<u>15</u>
<b>SEMESTER III</b>		
ACC 203	Intermediate Accounting I	3
ACC 204	Managerial Accounting	3
ECO 201	Principles of Economics I	3
GVT 201	American Government	3
† Electives		3-6
		<u>15-18</u>
<b>SEMESTER IV</b>		
ACC 238	Cost Accounting or	3
ACC 239	Income Tax Accounting	
BUS 234	Business Law	3
ECO 202	Principles of Economics II	3
OFC 231	Business Communications	3
† Electives		3-6
		<u>15-18</u>
<b>Minimum Hours Required:</b>		<b>63</b>

† Electives — A minimum of 9 credit hours must be selected from the following:

ACC 205	Business Finance	3
ACC 207	Intermediate Accounting II	3
ACC 238	Cost Accounting	3
ACC 239	Income Tax Accounting	3
ACC 703-713	Cooperative Work Experience	3
803-813		
ACC 704-714	Cooperative Work Experience	4
804-814		
BUS 143	Personal Finance	3
BUS 237	Organizational Behavior	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science and	4
	Data Processing	
MGT 206	Principles of Marketing	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
SPE 105	Fundamentals of Public Speaking	3
Any CS or DP Programming course		
* ENG 101 and ENG 102 may be substituted for COM 131 and COM 132 provided that SPE 105 is also taken.		
† Students who can demonstrate proficiency by previous training, experience, or placement tests may substitute a course from the electives listed for this program.		

**AVIATION MAINTENANCE TECHNOLOGY**

(Associate Degree)

This program is designed to provide a technical course of study which prepares the student for a career in aircraft maintenance. Such maintenance includes service, repair, and overhaul of aircraft engines and aircraft accessory systems. Upon completion of the program, the student is eligible to take the Federal Aviation Administration examinations for the Airframe and Powerplant Maintenance Technician School.

Training is provided by Mountain View College in cooperation with Braniff Education Systems, Inc. Braniff holds Air Agency Certificate 202-58 issued by the Federal Aviation Administration, and certifies approval as an aviation maintenance technician school.

Mountain View College will issue a Certificate of Completion when the Required Core Courses and either the Powerplant Curriculum courses OR the Airframe Curriculum courses are completed. If the Required Core courses, Powerplant AND Airframe Curriculum courses are completed, the student is qualified to receive an Associate of Applied Arts and Sciences degree in Aviation Maintenance Technology.

	CREDIT HOURS
<b>SEMESTER I</b>	
APM 100 Aircraft Basic Science*	5
APM 101 Applied Aircraft Science*	5
APM 102 Basic Electricity*	5
	<hr/> 15
<b>SEMESTER II</b>	
APM 200 Airframe Structures*	5
APM 201 Sheet Metal Structures*	5
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
Any APM 200 level course except APM 205 and APM 225	5
	<hr/> 18
<b>SEMESTER III</b>	
PSY 131 Human Relations	3
Any three APM 200 Level course except APM 205 and APM 225	15
	<hr/> 18
<b>SEMESTER IV</b>	
APM 205 Inspection and Review*	5
APM 225 Powerplant Review and Inspection*	5
Any APM 200 level course	5
SS 131 American Civilization or	
HST 101 History of the United States	3
	<hr/> 18
<b>Minimum Hours Required:</b>	<hr/> 69

\* Each APM course is taken independently and each course continues for only six weeks.

<b>SEMESTER III</b>		
AVT 221	Advanced Navigation	3
AVT 224	Ground School Instrument	3
AVT 227	Flight Commercial I*	2
AVT 228	Flight Commercial II*	3
PSY 131	Human Relations or	3
PSY 105	Introduction to Psychology	
		<hr/> 14
<b>SEMESTER IV</b>		
AVT 212	Airport Management	3
AVT 229	Flight Commercial III*	3
AVT 230	Flight Commercial IV - Instrument*	3
AVT 250	Flight Instructor Ground School	2
SPE 105	Fundamentals of Public Speaking	3
		<hr/> 14
<b>Minimum Hours Required:</b>		<hr/> 61
† Mathematics elective must be selected from the following:		
MTH 101	College Algebra	3
MTH 111	Mathematics for Business and Economics	3
MTH 130	Business Mathematics	3
MTH 195	Technical Mathematics	3
* Flight courses are flexible enrollment and may be taken in sequence regardless of semester.		
<b>ADDITIONAL CERTIFICATION AVAILABLE FOR CAREER PILOT OPTION</b>		
<b>Flight Instructor Certificate</b>		<b>CREDIT HOURS</b>
AVT 250	Flight Instructor Ground School	2
AVT 252	Instrument Flight Instructor Ground School	3
AVT 251	Flight Instructor - Airplane	2
AVT 253	Flight Instructor Airplane Instrument	1
<b>Multi Engine Rating</b>		
AVT 254	Flight Advanced I	1
<b>Flight Engineer</b>		
AVT 263	Flight Engineer Ground School	3
<b>Air Transport Pilot</b>		
AVT 264	Air Transport Pilot Ground School	3
<b>Type-Rating (small, multi-engine, turbo-jet powered airplane)</b>		
	Type Rating Turbo Jet Ground School	3
AVT 256	Flight Advanced II - Jet Type Rating	1

**AIR TRAFFIC CONTROL OPTION**

(Associate Degree)

Mountain View offers a specialized degree program in Air Traffic Control in conjunction with the Southwest Region ARTC. The Program provides students with the background and general experience in aviation which may enable them to enter an air traffic control career with the FAA. Career opportunities in Air Traffic Control include positions such as control tower operator, approach control, air route traffic control and flight service station specialist.

Students interested in admission to the Air Traffic Control degree program must have completed 15 credit hours (Aviation Technology courses recommended) prior to enrollment into the specialized Air Traffic Control courses and must meet FAA eligibility requirements.

		CREDIT HOURS
<b>SEMESTER I</b>		
AVT 121	Ground School Private	3
AVT 135	Flight Basic*	2
AVT 137	Flight Private Pilot*	1
AVT 210	FAA Regulations, Airspace & Air Traffic Control	3
AVT 221	Advanced Navigation	3
AVT 226	Meteorology	3
		15
<b>SEMESTER II</b>		
AVT 270	Orientation to ATC	5
AVT 272	Aircraft Types/ATC Communications	2
AVT 274	ATC Computer Operation	3
AVT 704	Cooperative work Experience	4
		14
<b>SEMESTER III</b>		
AVT 224	Ground School Instrument	3
ENG 101	Composition & Expository Reading	3
MTH 195	Technical Math	3
PSY 131	Human Relations	3
SPE 105	Fundamentals of Public Speaking	3
		15
<b>SEMESTER IV</b>		
AVT 212	Airport Management or	3
MGT 136	Principles of Management	
AVT 223	Airline Management or	3
MGT 242	Personnel Administration or	
PSY 131	Human Relations	
AVT 804	Cooperative Work Experience	4
ENG 102	Composition and Literature	3
		13
<b>SEMESTER V</b>		
AVT 814	Cooperative Work Experience	4
Minimum Hours Required:		61

\* Flight courses are flexible enrollment and may be taken in sequence regardless of semester.

† Electives — Must be selected from the following:

Any DP or CS course (including DP 700-800 Cooperative Work Experience)

DP 129	Data Entry Concepts	4
MGT 136	Principles of Management	3
MGT 206	Principles of Marketing	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
ECO 202	Principles of Economics II	3
MTH 202	Introductory Statistics	3
ENG 210	Technical Writing	3
BUS 105	Introduction to Business	3
ECO 201	Principles of Economics I	3

\* MTH 111, MTH 112, MTH 130 or an equivalent business math course

\*\* ACC 131 — Bookkeeping I, and ACC 132 — Bookkeeping II may be substituted for ACC 201 — Principles of Accounting

NOTE: Students may obtain credit toward a degree or certificate for only one of each of the pairs of courses listed below:

DP 133 or CS 184
DP 231 or CS 186
DP 244 or CS 182
CS 175 or CS 174

**DRAFTING AND DESIGN TECHNOLOGY**

(Associate Degree)

This program prepares the student for employment in a wide range of industries as a drafter or engineering aide. Information in related fields is provided to enable the student to work effectively with the engineer and professional staff. Enrollment in Drafting Cooperative Work Experience Courses (Co-op) provides on-the-job experience while in the program

	CREDIT HOURS
<b>SEMESTER I</b>	
DFT 183      Basic Drafting	4
DFT 135      Reproduction Processes	2
COM 131      Applied Composition and Speech or	3
ENG 101      Composition and Expository Reading	
MTH 195      Technical Mathematics or	3
MTH 101      College Algebra	
† Technical Elective	3
	<hr/> 15
<b>SEMESTER II</b>	
DFT 160      Manufacturing Fundamentals	2
Drafting Course*	3
Drafting Course* or Co-op**	3-4
COM 132      Applied Composition and Speech or	3
ENG 102      Composition and Literature	
MTH 196      Technical Mathematics or	3
MTH 102      Plane Trigonometry	
	<hr/> 14-15

## AVIATION TECHNOLOGY

Because of the varied and interrelated aviation career options available, Mountain View's Aviation Technology program is designed to allow students to take a group of core courses which includes selected aviation, English, Mathematics and human relations courses and then proceed with specialized courses in the specific career option they wish to enter.

The Associate Degree of Applied Arts and Sciences degree options are (1) Career Pilot including Flight Instructor Certificate, Multi-engine Rating, Flight Engineer and Air Transport Pilot Ground School and type-rating for small, multi engine, turbo jet powered airplane; (2) Air Cargo Transport; (3) Airline Marketing; (4) Fixed Base Operations/Airport Management; (5) Aircraft Dispatcher and (6) Air Traffic Control. A one year certificate program is available in Aircraft Dispatcher.

## CAREER PILOT OPTION

(Associate Degree)

The Career Pilot Option provides students with flight training and ground school through the commercial certificate. All ground school instruction and flight training conform to Part 61 and 141 of the Federal Aviation Administration Regulations. Prior to admission to the program, registration and payment of fees, consultation with and approval by an Aviation Technology instructor is necessary. Simulator fees, flight fees and fees for pre-and post-flight briefing are in addition to the regular tuition charge.

Students completing this option may find employment opportunities as an airline pilot, corporate pilot, flight engineer, flight instructor and other general aviation positions. It is recommended that students in the Career Pilot option schedule flight training during the summer months in addition to the spring and fall semesters to aid in completing the program within a two year period.

	CREDIT HOURS
<b>SEMESTER I</b>	
AVT 110 Introduction to Aviation	3
AVT 121 Ground School Private	3
AVT 122 Aviation Law	3
AVT 135 Flight Basic*	2
AVT 210 FAA Regulations	3
AVT 226 Meteorology	3
	<hr/> 17
<b>SEMESTER II</b>	
AVT 123 Ground School Commercial	3
AVT 128 Aero Engines and Systems	3
AVT 137 Flight Private Pilot*	1
AVT 220 Aero Dynamics	3
ENG 101 Composition and Expository Reading	3
† Mathematics Elective	3
	<hr/> 16

## AIR CARGO TRANSPORT OPTION

(Associate Degree)

This option is designed to provide students with an overview of transportation methods and technology associated with the aviation industry. Upon completion of the program, students may be eligible to be employed in positions such as air cargo sales, air freight transportation and cargo loading.

	CREDIT HOURS
<b>SEMESTER I</b>	
AVT 110 Introduction to Aviation	3
AVT 121 Ground School Private	3
AVT 122 Aviation Law	3
AVT 210 FAA Regulations	3
BUS 105 Introduction to Business	3
	<hr/> 15
<b>SEMESTER II</b>	
AVT 226 Meteorology	3
AVT 249 Air Transportation, Traffic and Cargo	3
ACC 201 Principles of Accounting I	3
ENG 101 Composition and Expository Reading	3
† Math Elective	3
	<hr/> 15
<b>SEMESTER III</b>	
AVT 212 Airport Management	3
AVT 223 Airline Management	3
MGT 136 Principles of Management	3
PSY 131 Human Relations or	3
PSY 105 Introduction to Psychology	
SPE 105 Fundamentals of Public Speaking	3
	<hr/> 15
<b>SEMESTER IV</b>	
AVT 225 Aviation Marketing	3
AVT 703 Cooperative Work Experience or	
BUS 234 Business Law	3
ACC 202 Principles of Accounting II	3
CS 175 Introduction to Computer Science	3
ECO 201 Principles of Economics I	3
	<hr/> 15
Minimum Hours Required:	60

**AIRLINE MARKETING OPTION**

(Associate Degree)

This Airline Marketing option stresses the significance and functions of marketing from the airline viewpoint. Students completing the program may opt to enter a variety of marketing related positions in the areas of customer service, sales and promotion, crew scheduling or entry-level management.

	CREDIT HOURS
<b>SEMESTER I</b>	
AVT 110 Introduction to Aviation	3
AVT 121 Ground School Private	3
AVT 122 Aviation Law	3
AVT 210 FAA Regulations	3
BUS 105 Introduction to Business	3
	<hr/> 15
<b>SEMESTER II</b>	
AVT 249 Air Transportation, Traffic and Cargo	3
ACC 201 Principles of Accounting I	3
CS 175 Introduction to Computer Science	3
ENG 101 Composition and Expository Reading	3
† Mathematics Elective	3
	<hr/> 15
<b>SEMESTER III</b>	
AVT 212 Airport Management	3
AVT 223 Airline Management	3
ECO 201 Principles of Economics I	3
PSY 131 Human Relations or	3
PSY 105 Introduction to Psychology	
SPE 105 Fundamentals of Public Speaking	3
	<hr/> 15
<b>SEMESTER IV</b>	
AVT 225 Aviation Marketing	3
AVT 703 Cooperative Work Experience	3
ACC 202 Principles of Accounting II	3
ECO 202 Principles of Economics II	3
‡ Technical Elective - Management	3
	<hr/> 15
<b>Minimum Hours Required:</b>	60
† Math Elective must be selected from the following:	
MTH 101 College Algebra	3
MTH 130 Business Mathematics	3
MTH 195 Technical Mathematics	3
‡ Technical Elective — Management must be selected from the following:	
MGT 206 Principles of Marketing	3
MGT 230 Salesmanship	3
MGT 233 Advertising and Sales Promotion	3

**AIRCRAFT DISPATCHER OPTION**

(Associate Degree)

The job performed by an aircraft dispatcher is an integral part of the overall flight operations for airlines. An individual in this position works in conjunction with an airline pilot and is responsible for regulation compliance, weather and loading procedures prior to take-off. In the Aircraft Dispatcher program students may earn a certificate after approximately one year or choose to complete the Associate Degree in Applied Arts and Sciences.

Entry into either program will be in accordance with Federal Aviation Administration Regulations and with instructor approval. Upon completion of the courses in the desired program, students may be recommended to apply to take the F.A.A. written examination for Aircraft Dispatcher.

	CREDIT HOURS
<b>SEMESTER I</b>	
AVT 110 Introduction to Aviation	3
AVT 121 Ground School Private	3
AVT 122 Aviation Law	3
AVT 210 FAA Regulations, Airspace & Air Traffic Control	3
AVT 226 Meteorology	3
	<hr/> 15
<b>SEMESTER II</b>	
AVT 123 Ground School Commercial	3
AVT 128 Aero Engine and Systems	3
AVT 221 Advanced Navigation	3
CS 175 Introduction to Computer Science	3
ENG 101 Composition and Expository Reading	3
	<hr/> 15
<b>SEMESTER III</b>	
AVT 224 Ground School Instrument	3
AVT 261 Aircraft Dispatcher	3
MTH 195 Technical Math	3
PSY 131 Human Relations	3
SPE 105 Fundamentals of Public Speaking	3
	<hr/> 15
<b>SEMESTER IV</b>	
AVT 262 Practical Dispatching	3
AV 129 Introduction to Aircraft Electrical Systems	3
BUS 105 Introduction to Business	3
MGT 136 Principles of Management	3
MTH 196 Technical Math	3
	<hr/> 15
<b>Minimum Hours Required:</b>	60



**FIXED BASE OPERATIONS/AIRPORT MANAGEMENT OPTION**

(Associate Degree)

This option provides students with a general administrative overview combining aviation and business courses stressing terminology, management techniques and functions as they apply to the aviation industry. Students completing this program may qualify for support or training positions in airport management, as staff members to operation superintendents or aviation authority boards. Positions as fixed base operators for aircraft dealers may include equipment sales and service and aircraft sales.

	CREDIT HOURS
<b>SEMESTER I</b>	
AVT 110 Introduction to Aviation	3
AVT 121 Ground School Private	3
AVT 122 Aviation Law	3
AVT 210 FAA Regulations	3
BUS 105 Introduction to Business	3
	<hr/> 15
<b>SEMESTER II</b>	
AVT 226 Meteorology	3
AVT 249 Air Transportation, Traffic and Cargo	3
CS 175 Introduction to Computer Science	3
ENG 101 Composition and Expository Reading	3
† Mathematics Elective	3
	<hr/> 15
<b>SEMESTER III</b>	
AVT 223 Airline Management	3
ACC 201 Principles of Accounting I	3
ECO 201 Principles of Economics I	3
PSY 131 Human Relations or	3
PSY 105 Introduction to Psychology	3
SPE 105 Fundamentals of Public Speaking	3
	<hr/> 15
<b>SEMESTER IV</b>	
AVT 212 Airport Management	3
AVT 703 Cooperative Work Experience or	3
MGT 153 Small Business Management	3
ACC 202 Principles of Accounting II	3
BUS 234 Business Law	3
ECO 202 Principles of Economics II	3
	<hr/> 15
Minimum Hours Required:	60
† Math Elective must be selected from the following:	
MTH 101 College Algebra	3
MTH 195 Technical Mathematics	3
MTH 130 Business Mathematics	3

**AIRCRAFT DISPATCHER**

(Certificate)

	CREDIT HOURS
<b>SEMESTER I</b>	
AVT 110 Introduction to Aviation	3
AVT 121 Ground School Private	3
AVT 122 Aviation Law	3
AVT 210 FAA Regulations, Airspace & Air Traffic Control	3
AVT 226 Meteorology	3
AVT 261 Aircraft Dispatcher	3
	<hr/> 18
<b>SEMESTER II</b>	
AVT 123 Ground School Commercial	3
AVT 128 Aero Engine and Systems	3
AVT 221 Advanced Navigation	3
AVT 224 Ground School Instrument	3
AVT 262 Practical Dispatching	3
	<hr/> 15
Minimum Hours Required:	33

**DATA PROCESSING PROGRAMMER**

(Associate Degree)

This curriculum is intended for the preparation of entry-level or trainee computer programmers who will work in an applications setting to support the general, administrative, and organizational information processing function of industry, commerce, business and government service. It is designed as a two-year career program to prepare students for jobs. Graduates should be able to work in conjunction with a systems analyst in the programming environment usually found in a medium to large job shop. It is intended to provide a sufficient foundation so that graduates with experience and continued learning may advance in career paths appropriate to their own particular interests and abilities.

	CREDIT HOURS
<b>SEMESTER I</b>	
CS 175 Introduction to Computer Science	3
BUS 105 Introduction to Business or	3
MGT 136 Principles of Management	
DP 137 Data Processing Mathematics or any business math*	3
COM 131 Applied Composition and Speech or	3
ENG 101 Composition and Expository Reading	
ACC 201 Principles of Accounting I**	3
	15
<b>SEMESTER II</b>	
DP 133 Beginning Programming (COBOL)	4
DP 138 Systems Analysis and Data Processing Logic	3
ECO 201 Principles of Economics I or	3
ECO 202 Principles of Economics II	
ACC 202 Principles of Accounting II	3
COM 132 Applied Composition and Speech or	3
ENG 102 Composition and Literature	
	16
<b>SEMESTER III</b>	
DP 136 Intermediate Programming (COBOL)	4
DP 142 RPG Programming or	3
DP 244 Basic Programming	
DP 233 Operating Systems and Communications	4
ACC 203 Intermediate Accounting or	3
ACC 238 Cost Accounting	
† Elective	3-4
	17-18
<b>SEMESTER IV</b>	
DP 231 Advanced Programming (ALC)	4
DP 232 Applied Systems	4
DP 236 Advanced COBOL Techniques or other 200 level DP or CS course	3-4
Any approved DP or CS course	3-4
	14-16
<b>Minimum Hours Required:</b>	62

**SEMESTER III**

Drafting Course*	3
EGR 106 Descriptive Geometry	3
‡ Technical Elective or Co-op**	3
GVT 201 American Government or	3
HST 101 History of the United States	
HD 105 Basic Processes of Interpersonal Relationships or	3
PSY 131 Human Relations	
	15-16

**SEMESTER IV**

Drafting Course*	3
Drafting Course* or Co-op**	3-4
‡ Technical Elective	3
PHY 131 Applied Physics	4
GVT 202 American Government or	3
HST 102 History of the United States	
	16-17

**Minimum Hours Required:**

61

\*Drafting Courses to be selected from the following:

DFT 136 Geological and Land Drafting	3
DFT 184 Intermediate Drafting	3
DFT 185 Architectural Drafting	4
DFT 230 Structural Drafting	3
DFT 231 Electronic Drafting	3
DFT 232 Technical Illustration	3
DFT 234 Advanced Technical Illustration	4
DFT 235 Building Equipment (Mechanical and Electrical)	3
DFT 236 Piping and Pressure Vessel Design	3
DFT 245 Computer Aided Design	3
DFT 246 Advanced CAD-Electronic	3
DFT 248 Advanced CAD-Mechanical	3
DFT 250 Sheet Metal Design	3
DFT 251 Industrial Design	3

\*\*Drafting Co-op Courses to be selected from the following:

DFT 703 Cooperative Work Experience	3
DFT 713 Cooperative Work Experience	3
DFT 803 Cooperative Work Experience	3
DFT 813 Cooperative Work Experience	3
DFT 704 Cooperative Work Experience	4
DFT 714 Cooperative Work Experience	4
DFT 804 Cooperative Work Experience	4
DFT 814 Cooperative Work Experience	4

‡ Technical Electives may be selected from Drafting, Applied Science or Engineering Technologies as approved by the Drafting Department

**ELECTRONICS TECHNOLOGY**

(Associate Degree)

This two year program will prepare students for work as electronics technicians by familiarizing them with most electronic testing equipment, training them in technical communications and providing them with electronic theory and skills.

	CREDIT HOURS
<b>SEMESTER I</b>	
ET 190 DC Circuits and Electrical Measurements or	
ET 135 DC-AC Theory and Circuit Analysis	4-6
COM 131 Applied Composition and Speech or	
ENG 101 Composition and Expository Reading	3
HST 101 History of the United States or	
GVT 201 American Government	3
DFT 182 Technical Drafting or	
DFT 183 Basic Drafting or	2
DFT 231 Electronic Drafting	3
Any Technical or College Level Mathematics	3
	15-17
<b>SEMESTER II</b>	
ET 191 AC Circuits (Unless ET 135 Completed)	(4)
ET 193 Active Devices	4
ET 194 Instrumentation	3
COM 132 Applied Composition and Speech or	
ENG 102 Composition & Literature	3
Any Technical or College Level Mathematics	3
	13-17
<b>SEMESTER III</b>	
ET 231 Special Circuits with Communications	
Applications	4
ET 232 Analysis of Electronics Logic and Switching	
Circuits	4
ET 238 Linear Integrated Circuits or	
ET 803 Cooperative Work Experience	3-4
ET 240 Electronic Theory and Application of Digital	
Computers	4
Applied Physics or College Level Physics	4
	19-20
<b>SEMESTER IV</b>	
ET 234 Electronic Circuits and Systems	3
ET 237 Modular Memories and Microprocessors	4
ET 239 Microwave Technology	3
HST 102 History of the United States or	
GVT 202 American Government	3
† Elective	3
	16
Minimum Hours Required:	63-66

† Electives must be selected from the following

HD 104	Educational or Career Planning	3
HD 105	Basic Processes of Interpersonal Relationships	3
PSY 105	Introduction to Psychology	3
PSY 131	Human Relations	3

**HOROLOGY**

(Certificate)

These intensive programs have the objectives of developing the student's manual dexterity, judgment, and skill in the repair and adjustment techniques required to service all types of modern timekeeping mechanisms: watches, clocks, timers, chronographs, self-winding, calendar, electric and electronic movements. Employment opportunities for skilled horologists may be found in jewelry stores, trade shops, or in one's own business. All Horology courses are on a Flexible Entry mode of registration on a space available basis. Students may enroll at the general registration for the fall and spring semester or they may enroll the first Monday in October and November in the fall semester and on the first Monday in February and March during the spring semester.

	CREDIT HOURS
<b>CLOCK REPAIR</b>	
<b>SEMESTER I</b>	
HOR 139 Antique Clock Theory and Repair	8
COM 131 Applied Composition and Speech	3
	11
<b>SEMESTER II</b>	
HOR 140 Modern Clock Theory and Repair	8
MGT 153 Small Business Management	3
	11
Minimum Hours Required:	22
<b>WATCH REPAIR</b>	
<b>SEMESTER I</b>	
HOR 141 Watch Cleaning and Assembly	8
HOR 142 Watch Part Replacement	8
COM 131 Applied Composition and Speech	3
	19
<b>SEMESTER II</b>	
HOR 143 Advanced Watchmaking I	8
HOR 144 Advanced Watchmaking II	8
MGT 153 Small Business Management	3
	19
Minimum Hours Required:	38

## ELECTRONICS TECHNOLOGY — AVIONICS OPTION

(Associate Degree)

The Associate Degree program in Avionics is an option to the Electronics Technology Program. This option provides the student with an electronics background and specialized skills in avionics. In this program a level of knowledge and practical skills adequate to gain entry-level employment in the installation and maintenance of aircraft electronics systems (avionics) is gained by students.

	CREDIT HOURS
<b>SEMESTER I</b>	
ET 135 DC-AC Theory and Circuit Analysis or	6
ET 190 DC Circuits and Electrical Measurements	(4)
AV 129 Introduction to Aircraft Electrical Systems	3
COM 131 Applied Composition and Speech or	
ENG 101 Composition and Expository Reading	3
Any Technical or College Level Mathematics	3
	13-15
<b>SEMESTER II</b>	
ET 191 AC Circuits (Unless ET 135 Completed)	(4)
ET 193 Active Devices	4
AV 235 Operational Testing of Aircraft Electronic Systems	4
COM 132 Applied Composition and Speech or	
ENG 102 Composition & Literature	3
Any Technical or College Level Mathematics	3
Applied Physics or College Level Physics	4
	18-22
<b>SEMESTER III</b>	
ET 231 Special Circuits with Communications Applications	4
ET 232 Analysis of Electronic Logic and Switching Circuits	4
ET 238 Linear Integrated Circuits or	
ET 803 Cooperative Work Experience	3-4
ET 240 Electronic Theory and Application of Digital Computers	4
† Elective	3
	19
<b>SEMESTER IV</b>	
ET 237 Modular Memories and Microprocessors	4
ET 239 Microwave Technology	3
AV 132 Aircraft Electrical and Electronics Systems Installation	4
MGT 153 Small Business Management or	
ET 813 Cooperative Work Experience	3
	14
<b>Minimum Hours Required:</b>	66-68

† Electives must be selected from the following

HD 104	Educational or Career Planning
HD 105	Basic Processes of Interpersonal Relationships
PSY 105	Introduction to Psychology
PSY 131	Human Relations

## MACHINE PARTS INSPECTION

(Associate Degree)

This program is designed to prepare the trainee in the techniques of quality control pertaining to Machine Parts production processes and inspection procedures based on sound metrological concepts. Because of the uniqueness in laboratory facilities required for this program, it is designed for in-plant training. Only support courses and courses requiring no laboratory will be taught on campus.

	CREDIT HOURS
<b>SEMESTER I</b>	
MPI 122 Industrial Quality Control & Procedures	3
COM 131 Applied Composition and Speech	3
MTH 195 Technical Mathematics	3
BPR 177 Blueprint Reading	2
	11
<b>SEMESTER II</b>	
MPI 124 Basic Inspection Fundamentals	5
BPR 178 Blueprint Reading	2
MTH 196 Technical Mathematics	3
QCT 122 Dimensional Measurement	3
	13
<b>SEMESTER III</b>	
MPI 135 Intermediate Inspection Concepts	5
MPI 138 Geometric Tolerancing & True Positioning	3
EGR 186 Manufacturing Processes	2
PSY 131 Human Relations	3
	13
<b>SEMESTER IV</b>	
MPI 220 Introduction to Materials and Processes	3
MPI 227 Non-Destructive Testing	3
MPI 803 Cooperative Work Experience	3
PHY 131 Applied Physics	4
	13
<b>SEMESTER V</b>	
MPI 223 Advanced Inspection Concepts	5
MPI 230 Introduction to Statistical Quality Control Techniques	3
MPI 237 Gage Control Standardization & Precision Measurement	3
MPI 813 Cooperative Work Experience	3
	14
<b>Minimum Hours Required:</b>	64

**MACHINE SHOP**

(Associate Degree)

The Machine Shop program will prepare the student for employment as an entry-level machinist in industry. It will also prepare him for entry into an apprentice or trainee program for machinist, tool and die-maker, etc. Successful students will find access to supportive type jobs in the metal working field such as planner, programmer, etc.

Enrollment in Machine Shop courses is open on the first Monday of October and November in the fall semester and the first Monday of February and March in the spring semester. In each case, such enrollment is subject to completion of specified prerequisite competencies. The program is designed to be self-paced by the student but students can generally plan to spend 18 months of study to complete the entire program.

		CREDIT HOURS
<b>SEMESTER I</b>		
MS 133	Basic Lathe	5
MS 134	Basic Milling Machine	5
BPR 177	Blueprint Reading	2
MTH 195	Technical Mathematics	3
		<hr/> 15
<b>SEMESTER II</b>		
MS 135	Intermediate Lathe	5
MS 136	Intermediate Milling Machine	5
BPR 178	Blueprint Reading	2
MTH 196	Technical Mathematics	3
OCT 122	Dimensional Measurement	3
		<hr/> 18
<b>SEMESTER III</b>		
MS 233	Advanced Lathe	5
MS 234	Advanced Milling Machine	5
COM 131	Applied Composition and Speech	3
EGR 186	Manufacturing Processes or	
MS 702	Cooperative Work Experience	2
PHY 131	Applied Physics	4
		<hr/> 19
<b>SEMESTER IV</b>		
MS 235	Applied Lathe	5
MS 236	Applied Milling Machine	5
PHY 132	Applied Physics or	
MS 704	Cooperative Work Experience	4
PSY 131	Human Relations	3
		<hr/> 17
Minimum Hours Required:		69

**MANAGEMENT CAREERS — SMALL BUSINESS MANAGEMENT OPTION**

(Associate Degree Program)

The Small Business Management option is designed to assist owners and managers of small businesses in developing the skills and techniques necessary for operation. This option is also designed for students who plan to become owners or operators of small businesses.

		Credit Hours
<b>SEMESTER I</b>		
MGT 136	Principles of Management	3
MGT 153	Small Business Management	3
COM 131	Applied Composition and Speech*	3
HUM 101	Introduction to the Humanities	3
† Elective		3
		<hr/> 15
<b>SEMESTER II</b>		
MGT 157	Small Business Bookkeeping and Accounting Practices**	3
COM 132	Applied Composition and Speech*	3
CS 175	Introduction to Computer Science	3
MTH 111	Mathematics for Business & Economics I or	3
MTH 112	Mathematics for Business & Economics II or	
MTH 130	Business Mathematics	
BUS 105	Intro to Business	3
		<hr/> 15
<b>SEMESTER III</b>		
MGT 206	Principles of Marketing	3
MGT 211	Small Business Operations	3
ECO 201	Principles of Economics I	3
PSY 131	Human Relations	3
† Elective		3
		<hr/> 15
<b>SEMESTER IV</b>		
MGT 210	Small Business Capitalization, Acquisition and Finance	3
BUS 234	Business Law	3
ECO 202	Principles of Economics II	3
	Social Science or Humanities Elective	3
† Elective		3
		<hr/> 15
Minimum Hours Required		60
†Elective — May be selected from the following:		
MGT 212	Special Problems in Business	1
OFC 160	Office Calculating Machines	3
OFC 172	Beginning Typing	3
ACC 201	Principles of Accounting I	3

\*Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.

\*\*Students may substitute ACC 201 for MGT 157.

## MANAGEMENT CAREERS — MID-MANAGEMENT OPTION

(Associate Degree)

The Mid-Management option is a cooperative plan with members of the business community whereby the student attends college classes in management and related courses and concurrently works at a regular, paid, part-time or full-time job in a sponsoring business firm. To enter the Mid-Management option, students must make formal application and be interviewed by a member of the Mid-Management faculty before final acceptance will be granted.

	CREDIT HOURS
<b>SEMESTER I</b>	
MGT 136 Principles of Management	3
MGT 150 Management Training	4
MGT 154 Management Seminar: Role of Supervision	2
BUS 105 Introduction to Business	3
COM 131 Applied Composition and Speech*	3
	15
<b>SEMESTER II</b>	
MGT 151 Management Training	4
MGT 155 Management Seminar: Personnel Management	2
COM 132 Applied Composition and Speech*	3
CS 175 Introduction to Computer Science	3
HUM 101 Introduction to the Humanities	3
MTH 111 Mathematics for Business and Economics I or	3
MTH 112 Mathematics for Business and Economics II or	
MTH 130 Business Mathematics	3
	18
<b>SEMESTER III</b>	
MGT 250 Management Training	4
MGT 254 Management Seminar: Organizational Development	2
ACC 201 Principles of Accounting I**	3
ECO 201 Principles of Economics I	3
PSY 131 Human Relations	3
	15
<b>SEMESTER IV</b>	
MGT 251 Management Training	4
MGT 255 Management Seminar: Planning Strategy, and the Decision Process	2
ECO 202 Principles of Economics II	3
Social Science elective or Humanities elective	3
† Elective	3
	15

Minimum Hours Required:

† Elective — May be selected from the following:

MGT 137 Principles of Retailing	3
MGT 153 Small Business Management	3
MGT 212 Special Problems in Business	1
MGT 230 Salesmanship	3
MGT 233 Advertising and Sales Promotion	3
OFC 160 Office Calculating Machines	3
OFC 172 Beginning Typing	3

\*Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.

\*\*Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.

## MANAGEMENT CAREERS — ADMINISTRATIVE MANAGEMENT OPTION

(Associate Degree)

The Administrative Management option offers a continuation of the traditional management and business studies. This option is designed for students seeking a detailed examination of management practices, techniques, and theories.

	CREDIT HOURS
<b>SEMESTER I</b>	
MGT 136 Principles of Management	3
BUS 105 Introduction to Business	3
COM 131 Applied Composition and Speech*	3
HUM 101 Introduction to the Humanities	3
† Elective	3
	15
<b>SEMESTER II</b>	
MGT 206 Principles of Marketing	3
ACC 201 Principles of Accounting I**	3
COM 132 Applied Composition and Speech*	3
CS 175 Introduction to Computer Science	3
MTH 111 Mathematics for Business and Economics I or	3
MTH 112 Mathematics for Business and Economics II or	
MTH 130 Business Mathematics	3
	15
<b>SEMESTER III</b>	
ACC 202 Principles of Accounting II	3
BUS 234 Business Law	3
ECO 201 Principles of Economics I	3
PSY 131 Human Relations	3
† Elective	3
	15
<b>SEMESTER IV</b>	
MGT 242 Personnel Administration	3
BUS 237 Organizational Behavior	3
ECO 202 Principles of Economics II	3
OFC 231 Business Communications	3
Social Science elective or Humanities elective	3
† Elective	3
	18
<b>Minimum Hours Required:</b>	63

† Electives — May be selected from the following:

MGT 137 Principles of Retailing	3
MGT 153 Small Business Management	3
MGT 212 Special Problems in Business	1
MGT 230 Salesmanship	3
MGT 233 Advertising and Sales Promotion	3
OFC 160 Office Calculating Machines	3
OFC 172 Beginning Typing	3

\*Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.

\*\*Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.

**OFFICE CAREERS — ADMINISTRATIVE ASSISTANT OPTION**

(Associate Degree)

The primary objective of the Administrative Assistant Option to the Office Careers Program is to prepare students for positions as assistants to administrators within public and private firms and agencies. Emphasis in this program is on the development of organizational and management skills in addition to basic office skills.

	CREDIT HOURS
<b>SEMESTER I</b>	
OFC 160 Office Calculating Machines	3
† OFC 172 Beginning Typing** or	3
OFC 173 Intermediate Typing	(3)
‡ COM 131 Applied Composition and Speech	3
MTH 130 Business Mathematics	3
BUS 105 Introduction to Business	3
† Elective	3
	<hr/> 18
<b>SEMESTER II</b>	
† OFC 173 Intermediate Typing or	3
OFC 273 Advanced Typing Applications	(2)
OFC 162 Office Procedures	3
OFC 165 Introduction to Word Processing	3
CS 175 Introduction to Computer Science	3
MGT 136 Principles of Management	3
‡ COM 132 Applied Composition and Speech	3
	<hr/> 17-18
<b>SEMESTER III</b>	
† OFC 273 Advanced Typing Applications or	2
† Elective	
OFC 231 Business Communications	3
ACC 131 Bookkeeping I or	3
ACC 201 Principles of Accounting	
PSY 131 Human Relations or	3
PSY 105 Introduction to Psychology	
† Electives	6
	<hr/> 17
<b>SEMESTER IV</b>	
OFC 256 Office Management or	3
BUS 237 Organizational Behavior	
HUM 101 Introduction to Humanities	3
† Electives	9
	<hr/> 15
Minimum Hours Required:	67

**OFFICE CAREERS — LEGAL SECRETARY OPTION**

(Associate Degree)

The primary objective of this option is to prepare students to become competent legal secretaries, capable of performing office and clerical duties within public and private firms and agencies. Students enrolled in the program will have an opportunity to secure intensive training in basic skills. An Associate in Applied Arts and Sciences Degree is awarded for successful completion.

	CREDIT HOURS
<b>SEMESTER I</b>	
OFC 159 Beginning Shorthand or	
OFC 103 Speedwriting	4
OFC 160 Office Calculating Machines*	3
† OFC 172 Beginning Typing** or	3
OFC 173 Intermediate Typing	(3)
‡ COM 131 Applied Composition and Speech	3
MTH 130 Business Mathematics	3
	<hr/> 16-19
<b>SEMESTER II</b>	
OFC 166 Intermediate Shorthand*** or	4
OFC 104 Speedwriting Dictation	(3)
‡ OFC 173 Intermediate Typing or	(3)
OFC 273 Advanced Typing Applications	(2)
OFC 162 Office Procedures	3
ACC 131 Bookkeeping I or	3
ACC 201 Principles of Accounting I	
BUS 105 Introduction to Business	3
‡ COM 132 Applied Composition and Speech	3
	<hr/> 17-19
<b>SEMESTER III</b>	
OFC 165 Introduction to Word Processing	3
OFC 167 Legal Terminology and Transcription	3
OFC 231 Business Correspondence	3
# OFC 266 Advanced Shorthand	4
OFC 273 Advanced Typing Applications or	2
† Elective	(3)
CS 175 Introduction to Computer Science	3
	<hr/> 18-19
<b>SEMESTER IV</b>	
OFC 265 Word Processing Practices and Procedures	3
OFC 274 Legal Office Procedures	3
OFC 275 Secretarial Procedures or	3
OFC 803 Cooperative Work Experience or	
OFC 804 Cooperative Work Experience	(4)
HUM 101 Introduction to Humanities	3
PSY 131 Human Relations or	3
PSY 105 Introduction to Psychology	
	<hr/> 15-16
Minimum Hours Required:	66



## MANAGEMENT CAREERS — MID-MANAGEMENT OPTION

(Associate Degree)

The Mid-Management option is a cooperative plan with members of the business community whereby the student attends college classes in management and related courses and concurrently works at a regular, paid, part-time or full-time job in a sponsoring business firm. To enter the Mid-Management option, students must make formal application and be interviewed by a member of the Mid-Management faculty before final acceptance will be granted.

	CREDIT HOURS
<b>SEMESTER I</b>	
MGT 136 Principles of Management	3
MGT 150 Management Training	4
MGT 154 Management Seminar: Role of Supervision	2
BUS 105 Introduction to Business	3
COM 131 Applied Composition and Speech*	3
	15
<b>SEMESTER II</b>	
MGT 151 Management Training	4
MGT 155 Management Seminar: Personnel Management	2
COM 132 Applied Composition and Speech*	3
CS 175 Introduction to Computer Science	3
HUM 101 Introduction to the Humanities	3
MTH 111 Mathematics for Business and Economics I or	3
MTH 112 Mathematics for Business and Economics II or	
MTH 130 Business Mathematics	
	18
<b>SEMESTER III</b>	
MGT 250 Management Training	4
MGT 254 Management Seminar: Organizational Development	2
ACC 201 Principles of Accounting I**	3
ECO 201 Principles of Economics I	3
PSY 131 Human Relations	3
	15
<b>SEMESTER IV</b>	
MGT 251 Management Training	4
MGT 255 Management Seminar: Planning Strategy, and the Decision Process	2
ECO 202 Principles of Economics II	3
Social Science elective or Humanities elective	3
† Elective	3
	15
<b>Minimum Hours Required:</b>	63
† Elective — May be selected from the following:	
MGT 137 Principles of Retailing	3
MGT 153 Small Business Management	3
MGT 212 Special Problems in Business	1
MGT 230 Salesmanship	3
MGT 233 Advertising and Sales Promotion	3
OFC 160 Office Calculating Machines	3
OFC 172 Beginning Typing	3

\*Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.

\*\*Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.

## MANAGEMENT CAREERS — ADMINISTRATIVE MANAGEMENT OPTION

(Associate Degree)

The Administrative Management option offers a continuation of the traditional management and business studies. This option is designed for students seeking a detailed examination of management practices, techniques, and theories.

	CREDIT HOURS
<b>SEMESTER I</b>	
MGT 136 Principles of Management	3
BUS 105 Introduction to Business	3
COM 131 Applied Composition and Speech*	3
HUM 101 Introduction to the Humanities	3
† Elective	3
	15
<b>SEMESTER II</b>	
MGT 206 Principles of Marketing	3
ACC 201 Principles of Accounting I**	3
COM 132 Applied Composition and Speech*	3
CS 175 Introduction to Computer Science	3
MTH 111 Mathematics for Business and Economics I or	3
MTH 112 Mathematics for Business and Economics II or	
MTH 130 Business Mathematics	
	15
<b>SEMESTER III</b>	
ACC 202 Principles of Accounting II	3
BUS 234 Business Law	3
ECO 201 Principles of Economics I	3
PSY 131 Human Relations	3
† Elective	3
	15
<b>SEMESTER IV</b>	
MGT 242 Personnel Administration	3
BUS 237 Organizational Behavior	3
ECO 202 Principles of Economics II	3
OFC 231 Business Communications	3
Social Science elective or Humanities elective	3
† Elective	3
	18
<b>Minimum Hours Required:</b>	63
† Electives — May be selected from the following:	
MGT 137 Principles of Retailing	3
MGT 153 Small Business Management	3
MGT 212 Special Problems in Business	1
MGT 230 Salesmanship	3
MGT 233 Advertising and Sales Promotion	3
OFC 160 Office Calculating Machines	3
OFC 172 Beginning Typing	3

\*Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.

\*\*Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.

**OFFICE CAREERS — ADMINISTRATIVE ASSISTANT OPTION**

(Associate Degree)

The primary objective of the Administrative Assistant Option to the Office Careers Program is to prepare students for positions as assistants to administrators within public and private firms and agencies. Emphasis in this program is on the development of organizational and management skills in addition to basic office skills.

	CREDIT HOURS
<b>SEMESTER I</b>	
OFC 160 Office Calculating Machines	3
† OFC 172 Beginning Typing** or	3
OFC 173 Intermediate Typing	(3)
‡ COM 131 Applied Composition and Speech	3
MTH 130 Business Mathematics	3
BUS 105 Introduction to Business	3
† Elective	3
	18
<b>SEMESTER II</b>	
† OFC 173 Intermediate Typing or	3
OFC 273 Advanced Typing Applications	(2)
OFC 162 Office Procedures	3
OFC 165 Introduction to Word Processing	3
CS 175 Introduction to Computer Science	3
MGT 136 Principles of Management	3
‡ COM 132 Applied Composition and Speech	3
	17-18
<b>SEMESTER III</b>	
† OFC 273 Advanced Typing Applications or	2
† Elective	
OFC 231 Business Communications	3
ACC 131 Bookkeeping I or	3
ACC 201 Principles of Accounting	
PSY 131 Human Relations or	3
PSY 105 Introduction to Psychology	
† Electives	6
	17
<b>SEMESTER IV</b>	
OFC 256 Office Management or	3
BUS 237 Organizational Behavior	
HUM 101 Introduction to Humanities	3
† Electives	9
	15
Minimum Hours Required:	67

**OFFICE CAREERS — LEGAL SECRETARY OPTION**

(Associate Degree)

The primary objective of this option is to prepare students to become competent legal secretaries, capable of performing office and clerical duties within public and private firms and agencies. Students enrolled in the program will have an opportunity to secure intensive training in basic skills. An Associate in Applied Arts and Sciences Degree is awarded for successful completion.

	CREDIT HOURS
<b>SEMESTER I</b>	
OFC 159 Beginning Shorthand or	
OFC 103 Speedwriting	4
OFC 160 Office Calculating Machines*	3
† OFC 172 Beginning Typing** or	3
OFC 173 Intermediate Typing	(3)
‡ COM 131 Applied Composition and Speech	3
MTH 130 Business Mathematics	3
	16-19
<b>SEMESTER II</b>	
OFC 166 Intermediate Shorthand*** or	4
OFC 104 Speedwriting Dictation	(3)
‡ OFC 173 Intermediate Typing or	(3)
OFC 273 Advanced Typing Applications	(2)
OFC 162 Office Procedures	3
ACC 131 Bookkeeping I or	3
ACC 201 Principles of Accounting I	
BUS 105 Introduction to Business	3
‡ COM 132 Applied Composition and Speech	3
	17-19
<b>SEMESTER III</b>	
OFC 165 Introduction to Word Processing	3
OFC 167 Legal Terminology and Transcription	3
OFC 231 Business Correspondence	3
# OFC 266 Advanced Shorthand	4
OFC 273 Advanced Typing Applications or	2
† Elective	(3)
CS 175 Introduction to Computer Science	3
	18-19
<b>SEMESTER IV</b>	
OFC 265 Word Processing Practices and Procedures	3
OFC 274 Legal Office Procedures	3
OFC 275 Secretarial Procedures or	3
OFC 803 Cooperative Work Experience or	
OFC 804 Cooperative Work Experience	(4)
HUM 101 Introduction to Humanities	3
PSY 131 Human Relations or	3
PSY 105 Introduction to Psychology	
	15-16
Minimum Hours Required:	66

†Electives — Must be taken from the following:

OFC	Any OFC course may be selected	
OFC 803/804	Cooperative Work Experience	3-4
ACC 132	Bookkeeping II	3
ACC 202	Principles of Accounting II	3
BUS 143	Personal Finance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
MGT 136	Principles of Management	3
MGT 242	Personnel Administration	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science	4
ECO 201	Principles of Economics I	3
SPE 105	Fundamentals of Public Speaking	3

†Students may be placed in typing courses based on proficiency level determined by previous training, experience and/or placement tests.

‡Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. However, students must take SPE 105 as an elective when substituting ENG 101 and ENG 102.

\*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.

\*\*OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.

†Electives — Must be taken from the following:

OFC	Any OFC course may be selected	
OFC 803/804	Cooperative Work Experience	3-4
ACC 132	Bookkeeping II	3
ACC 202	Principles of Accounting II	3
BUS 143	Personal Finance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
MGT 136	Principles of Management	3
MGT 242	Personnel Administration	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science & Data Processing	4
ECO 201	Principles of Economics I	3
‡ SPE 105	Fundamentals of Public Speaking	3

†Students may be placed in typing courses based on proficiency level determined by previous training, experience and/or placement tests.

‡ Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. However, students must take SPE 105 as an elective when substituting ENG 101 and ENG 102.

# If OFC 103 and OFC 104 are taken, an approved elective may be substituted.

\*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.

\*\*OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.

\*\*\*OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

## OFFICE CAREERS — PROFESSIONAL SECRETARY OPTION (Associate Degree)

The primary objective of this option is to prepare students to become competent secretaries, capable of performing office and clerical duties within public and private firms and agencies. Students enrolled in the program will have an opportunity to secure intensive training in basic skills. An Associate in Applied Arts and Sciences Degree is awarded for successful completion.

SEMESTER I		CREDIT HOURS	
OFC 160	Office Calculating Machines*	3	
OFC 159	Beginning Shorthand or	4	
OFC 103	Speedwriting		
† OFC 172	Beginning Typing** or	3	
OFC 173	Intermediate Typing	(3)	
‡ COM 131	Applied Composition and Speech	3	
MTH 130	Business Mathematics	3	
		16-17	
SEMESTER II			
OFC 166	Intermediate Shorthand*** or	4	
OFC 104	Speedwriting Dictation	(3)	
‡ OFC 173	Intermediate Typing or	(3)	
OFC 273	Advanced Typing Applications	(2)	
OFC 162	Office Procedures	3	
ACC 131	Bookkeeping I or	3	
ACC 201	Principles of Accounting I		
BUS 105	Introduction to Business	3	
‡ COM 132	Applied Composition and Speech	3	
		17-19	
SEMESTER III			
OFC 165	Introduction to Word Processing	3	
OFC 231	Business Correspondence	3	
CS 175	Introduction to Computer Science	3	
# OFC 266	Advanced Shorthand	4	
PSY 131	Human Relations or	3	
PSY 105	Introduction to Psychology		
OFC 273	Advanced Typing or	2	
† Elective		(3)	
		18-19	

SEMESTER IV		
OFC 265	Word Processing Practices and Procedures	3
OFC 275	Secretarial Procedures or	3
OFC 803	Cooperative Work Experience or	
OFC 804	Cooperative Work Experience	(4)
HUM 101	Introduction to Humanities	3
† Electives		6-7
		15-17

Minimum Required Hours:

66

†Electives — Must be taken from the following:

OFC	Any OFC course may be selected	
OFC 803/804	Cooperative Work Experience	3-4
ACC 132	Bookkeeping II	3
ACC 202	Principles of Accounting II	3
BUS 143	Personal Finance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
MGT 136	Principles of Management	3
MGT 242	Personnel Administration	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science & Data Processing	4
ECO 201	Principles of Economics I	3
‡ SPE 105	Fundamentals of Public Speaking	3

†Students may be placed in typing courses based on proficiency level determined by previous training, experience and/or placement tests.

‡ Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. However, students must take SPE 105 as an elective when substituting ENG 101 and ENG 102.

# If OFC 103 and OFC 104 are taken, an approved elective may be substituted.

\*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.

\*\*OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.

\*\*\*OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

**OFFICE CAREERS — GENERAL OFFICE**

(Certificate)

The General Office Certificate Program is designed to provide the student with a basic working knowledge and skills in various office activities. A general knowledge of business concepts and procedures is provided.

	CREDIT HOURS
<b>SEMESTER I</b>	
OFC 160 Office Calculating Machines*	3
† OFC 172 Beginning Typing**	3
COM 131 Applied Composition and Speech	3
MTH 130 Business Mathematics	3
† Electives	7
	<hr/> 19
<b>SEMESTER II</b>	
ACC 131 Bookkeeping I	3
BUS 105 Introduction to Business	3
CS 175 Introduction to Computer Science	3
† Electives	7
	<hr/> 16
Minimum Hours Required:	35

†Electives — Must be taken from the following:

OFC 103	Speedwriting Theory	4
OFC 104	Speedwriting Dictation	3
OFC 159	Beginning Shorthand	4
OFC 162	Office Procedures	3
OFC 165	Introduction to Word Processing	3
OFC 166	Intermediate Shorthand***	4
OFC 173	Intermediate Typing	3
OFC 231	Business Communications	3
ACC 132	Bookkeeping II	3
ACC 201	Principles of Accounting I	3
COM 132	Applied Composition and Speech	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
MGT 136	Principles of Management	3
BUS 234	Business Law	3
CS 250	Contemporary Topics in Computer Science	3
OFC 273	Advanced Typing Applications	2
OFC 275	Secretarial Procedures	3
OFC 803	Cooperative Work Experience or	3
OFC 804	Cooperative Work Experience	(4)

†Students who can demonstrate proficiency by previous training, experience or placement tests may substitute a course from the electives listed for the program.

- \*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.  
 \*\*OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.  
 \*\*\*OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

**OFFICE CAREERS — GENERAL OFFICE**

(Certificate — Office Clerical Emphasis)

	CREDIT HOURS
<b>SEMESTER I</b>	
OFC 160 Office Calculating Machines*	3
OFC 162 Office Procedures	3
† OFC 172 Beginning Typing**	3
COM 131 Applied Composition and Speech	3
MTH 130 Business Mathematics	3
† Elective	3
	<hr/> 18
<b>SEMESTER II</b>	
OFC 165 Introduction to Word Processing	3
OFC 173 Intermediate Typing	3
OFC 231 Business Communications	3
ACC 131 Bookkeeping I	3
BUS 105 Introduction to Business	3
CS 175 Introduction to Computer Science	3
	<hr/> 18
Minimum Hours Required:	36

†Electives — Must be taken from the following:

OFC 103	Speedwriting Theory	4
OFC 104	Speedwriting Dictation	3
OFC 159	Beginning Shorthand	4
OFC 166	Intermediate Shorthand***	4
OFC 231	Business Communications	3
ACC 132	Bookkeeping II	3
ACC 201	Principles of Accounting I	3
COM 132	Applied Composition and Speech	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
MGT 136	Principles of Management	3
BUS 234	Business Law	3
CS 250	Contemporary Topics in Computer Science	3
OFC 273	Advanced Typing Applications	2
OFC 275	Secretarial Procedures	3
OFC 803	Cooperative Work Experience or	3
OFC 804	Cooperative Work Experience	(4)

†Students who can demonstrate proficiency by previous training, experience or placement tests may substitute a course from the electives listed for the program.

- \*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.  
 \*\*OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.  
 \*\*\*OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

**OFFICE CAREERS — GENERAL OFFICE**

(Certificate — Accounting Emphasis)

	CREDIT HOURS
<b>SEMESTER I</b>	
OFC 160 Office Calculating Machines*	3
† OFC 172 Beginning Typing**	3
ACC 131 Bookkeeping I or	3
ACC 201 Principles of Accounting I	3
COM 131 Applied Composition and Speech	3
MTH 130 Business Mathematics	3
† Elective	3
	<b>18</b>
<b>SEMESTER II</b>	
‡ ACC 132 Bookkeeping II or	3
† Elective	
BUS 105 Introduction to Business	3
CS 175 Introduction to Computer Science	3
† Electives	8
	<b>17</b>
<b>Minimum Hours Required:</b>	<b>35</b>

†Electives — Must be taken from the following:

OFC 103	Speedwriting Theory	4
OFC 104	Speedwriting Dictation	3
OFC 159	Beginning Shorthand	4
OFC 162	Office Procedures	3
OFC 165	Introduction to Word Processing	3
OFC 166	Intermediate Shorthand***	4
OFC 173	Intermediate Typing	3
OFC 231	Business Communications	3
ACC 132	Bookkeeping II	3
ACC 201	Principles of Accounting I	3
COM 132	Applied Composition and Speech	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
MGT 136	Principles of Management	3
BUS 234	Business Law	3
CS 250	Contemporary Topics in Computer Science	3
OFC 273	Advanced Typing Applications	2
OFC 275	Secretarial Procedures	3
OFC 803	Cooperative Work Experience or	3
OFC 804	Cooperative Work Experience	(4)

†Students who can demonstrate proficiency by previous training, experience or placement tests may substitute a course from the electives listed for the program.

‡ Required if ACC 131 was taken previously.

\*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.

\*\*OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.

\*\*\*OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166

**POSTAL SERVICE ADMINISTRATION**

(Associate Degree)

The Postal Service Administration curriculum is designed as a two-year program that leads to an Associate Degree in Applied Arts and Sciences. The program aids the student in developing postal skills and provides the student with an insight into multi-level functions employed throughout the postal service system. Emphasis is directed to the areas of methodology, technology, management, and leadership concepts reflected in modern day technology as applied to public service related agencies.

	CREDIT HOURS
<b>SEMESTER I</b>	
PSA 110 Introduction to Postal Service	3
PSA 120 Mail Processing	3
COM 131 Applied Composition and Speech	3
MTH 130 Business Mathematics	3
PSY 105 Introduction to Psychology	3
	<b>15</b>
<b>SEMESTER II</b>	
PSA 122 Customer Services	3
PSA 125 Postal Economics and Finance	3
COM 132 Applied Composition and Speech	3
CS 175 Introduction to Computer Science	3
PSY 131 Human Relations	3
	<b>15</b>
<b>SEMESTER III</b>	
PSA 210 Labor Relations	3
PSA 212 Employee Services	3
MGT 171 Introduction to Supervision	3
PSY 202 Applied Psychology	3
SOC 101 Introduction to Sociology	3
† Elective	3
	<b>18</b>
<b>SEMESTER IV</b>	
PSA 214 Postal Problems Analysis	3
BUS 237 Organizational Behavior	3
MGT 242 Personnel Administration	3
GVT 201 American Government	3
† Elective	3
	<b>15</b>
<b>Minimum Hours Required:</b>	<b>63</b>
† Electives must be selected from the following:	
HD 104 Educational or Career Planning	3
HD 105 Basic Processes of Interpersonal Relationships	3
PSY 105 Introduction to Psychology	3
PSY 131 Human Relations	3

**WELDING TECHNOLOGY**

(Associate Degree)

The Welding Technology program is designed to prepare the student in the basic processes of oxyacetylene and arc welding plus many specialized welding applications as options to fit the specific needs of the student. In addition, instruction is offered in related support areas such as metallurgy, tooling, drafting, pattern layout and characteristics of materials. Thus, the program offers preparation for both entry level jobs as well as welding inspectors.

The student will be required to purchase a basic set of tools which will be used in class and later on the job. Tool lists will be given out by the instructor during the first week of classes.

	CREDIT HOURS
<b>SEMESTER I</b>	
WE 111 Oxyfuel I	2
WE 112 Oxyfuel II	2
WE 113 Shielded Metal Arc Welding I	2
WE 114 Shielded Metal Arc Welding II	2
DFT 182 Technician Drafting	2
MTH 195 Technical Mathematics	3
COM 131 Applied Composition and Speech	3
	<b>16</b>
<b>SEMESTER II</b>	
WE 115 Shielded Metal Arc Welding II	4
WE 117 General Metal Layout	3
WE 118 Welding Inspection and Quality Control	4
PSY 131 Human Relations	3
WE 703 Cooperative Work Experience or	3
† Elective	
	<b>17</b>
<b>SEMESTER III</b>	
WE 211 Gas Tungsten Arc Welding I	2
WE 212 Gas Tungsten Arc Welding II	2
WE 214 Gas Metal Arc Welding I	2
WE 215 Gas Metal Arc Welding II	2
WE 217 Basic Welding Metallurgy	3
PHY 131 Applied Physics	4
	<b>15</b>
<b>SEMESTER IV</b>	
WE 116 Shielded Metal Arc Welding IV	4
WE 213 Gas Tungsten Arc Welding III	4
WE 216 Gas Metal Arc Welding III	4
WE 219 Welding Design	3
† Elective	2
	<b>17</b>
<b>Minimum Hours Required:</b>	<b>65</b>

† Electives must be selected from the following:

ACC 131	Bookkeeping I
ACC 132	Bookkeeping II
GVT 201	American Government
MTH 111	Mathematics for Business and Economics
WE 218	Applied Welding Metallurgy
WE 220	Special Welding Application I

**WELDING TECHNOLOGY**

(Certificate)

	CREDIT HOURS
<b>SEMESTER I</b>	
WE 111 Oxyfuel I	2
WE 112 Oxyfuel II	2
WE 113 Shielded Metal Arc Welding I	2
WE 114 Shielded Metal Arc Welding II	2
WE 211 Gas Tungsten Arc Welding I	2
WE 212 Gas Tungsten Arc Welding II	2
WE 214 Gas Metal Arc Welding I	2
WE 215 Gas Metal Arc Welding II	2
	<b>16</b>
<b>SEMESTER II</b>	
WE 115 Shielded Metal Arc Welding III	4
WE 116 Shielded Metal Arc Welding IV	4
WE 117 General Metal Layout	3
WE 213 Gas Tungsten Arc Welding III*	4
WE 216 Gas Metal Arc Welding III*	4
	<b>19</b>
<b>Minimum Hours Required:</b>	<b>35</b>

\* WE 704 Cooperative Work Experience may be substituted for WE 213 or WE 216.

Enrollment in welding courses is open on the first Monday of October and November in the fall semester and the first Monday of February and March in the spring semester. In each case such enrollment is subject to completion of specified prerequisite competencies. The program is designed to be self-paced by the student but in general the student should plan to spend 18 months in study to complete the program.

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# NOTES

Mountain View College  
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