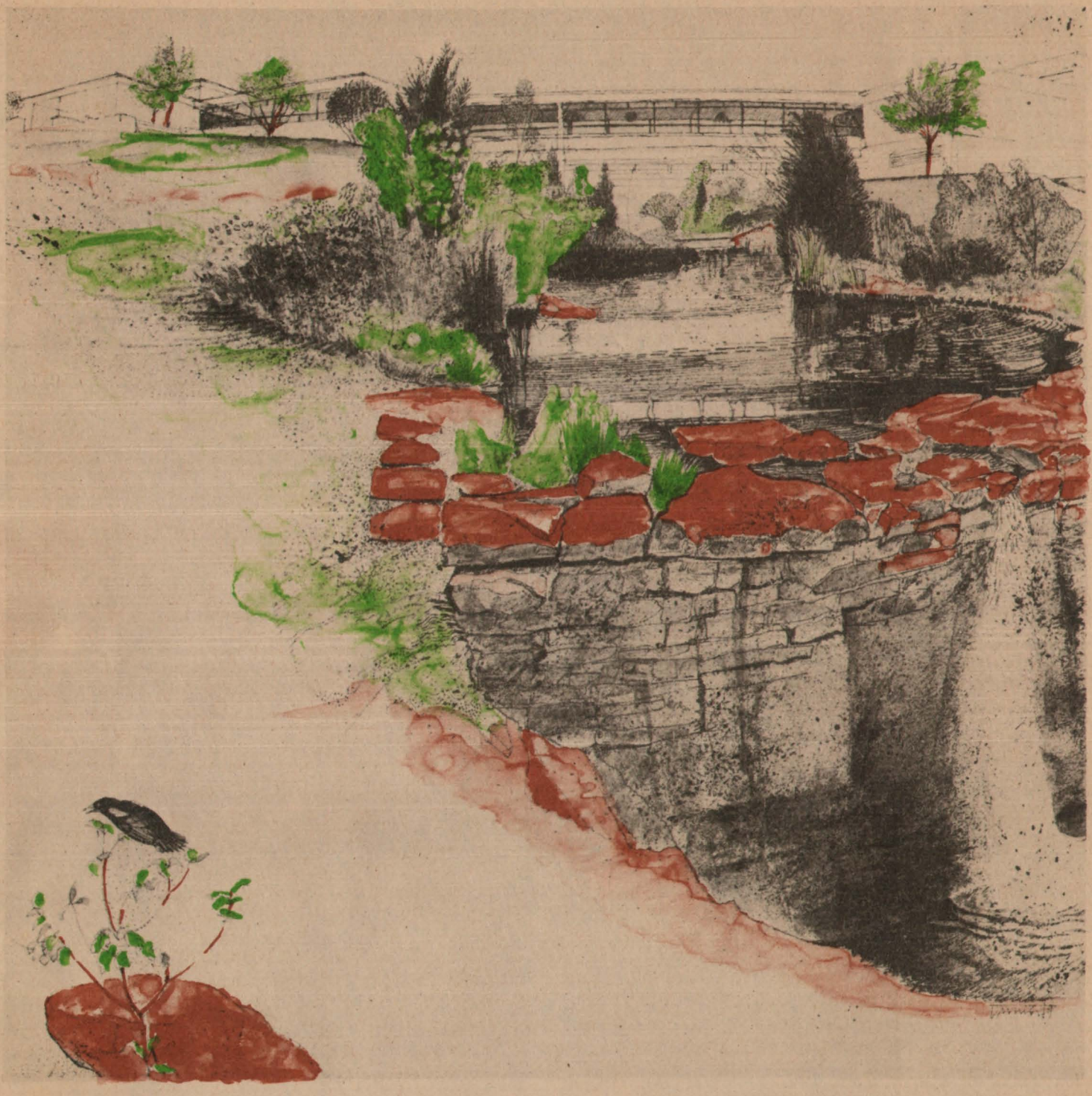
Mountain View College

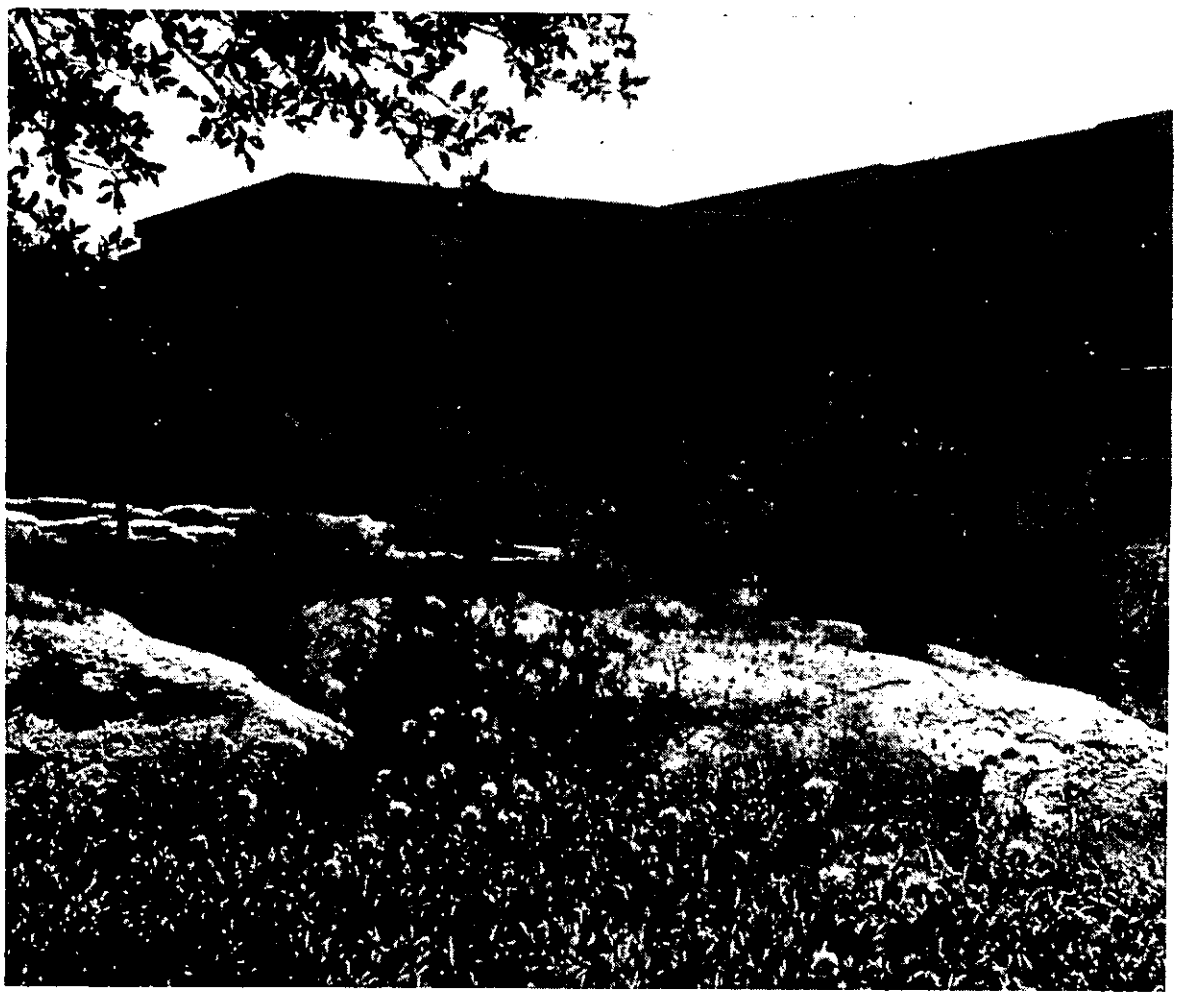
Catalog 1981-82



Dallas County Community College District

All blank pages have been removed from this document.

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.

CONTENTS

MOUNTAIN VIEW COLLEGE

GENERAL INFORMATION

For the Seven Member Colleges of the DCCCD

ACADEMIC CALENDAR, 1981-82

SUMMER SESSIONS, 1981

First Session

May 29 (F)	Registration
June 1 (M)	Classes begin
June 2 (T)	Last day for tuition refund
June 4 (R)	4th class day
June 29 (M)	Last day to withdraw "W"
July 3 (F)	Independence Day holiday
July 6 (M)	Final Examinations
July 6 (M)	Session closes

Second Session

July 7 (T)	Registration
July 9 (R)	Classes begin
July 10 (F)	Last day for tuition refund
July 14 (T)	4th class day
Aug. 6 (R)	Last day to withdraw "W"
Aug. 12 (W)	Final examinations
Aug. 12 (W)	Session closes

FALL SEMESTER, 1981

Aug. 17 (M)	Faculty reports
Aug. 18-20 (T-R)	Registration
Aug. 21 (F)	Faculty development
Aug. 22 (S)	Saturday classes begin
Aug. 24 (M)	Classes begin
Aug. 31 (M)	Last day for tuition refund
Sept. 4 (F)	12th class day
Sept. 7 (M)	Labor Day holiday
Nov. 26 (R)	Thanksgiving holidays begin
Nov. 30 (M)	Classes resume
Dec. 4 (F)	Last day to withdraw "W"
Dec. 11 (F)	Last day of classes
Dec. 12 (S)	Final exams., Sat. classes
Dec. 14-17 (M-R)	Final examinations
Dec. 17 (R)	Semester closes

SPRING SEMESTER, 1982

Jan. 11 (M)	Faculty reports
Jan. 12-14 (T-R)	Registration
Jan. 15 (F)	Faculty development
Jan. 16 (S)	Saturday classes begin
Jan. 18 (M)	Classes begin
Jan. 25 (M)	Last day for tuition refund
Jan. 29 (F)	12th class day
Feb. 18 (R)	District Conference Day
Feb. 19 (F)	Faculty development
Mar. 15 (M)	Spring break begins
Mar. 19 (F)	Spring holiday for all employees
Mar. 22 (M)	Classes resume
Apr. 9 (F)	Easter holidays begin
Apr. 12 (M)	Classes resume
May 7 (F)	Last day to withdraw "W"
May 14 (F)	Last day of classes
May 15 (S)	Final exams., Sat. classes
May 17-20 (M-R)	Final examinations
May 20 (R)	Graduation
May 20 (R)	Semester closes

SUMMER SESSIONS, 1982

First Session

May 27 (R)	Registration
May 31 (M)	Memorial Day holiday
June 1 (T)	Classes begin
June 2 (W)	Last day for tuition refund
June 4 (F)	4th class day
June 29 (T)	Last day to withdraw "W"
July 5 (M)	Independence Day holiday
July 6 (T)	Final examinations
July 6 (T)	Session closes

Second Session

July 8 (R)	Registration
July 12 (M)	Classes begin
July 13 (T)	Last day for tuition refund
July 15 (R)	4th class day
Aug. 9 (M)	Last day to withdraw "W"
Aug. 13 (F)	Final examinations
Aug. 13 (F)	Session closes

1981

AUGUST

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

SEPTEMBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

OCTOBER

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

1982

JANUARY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

FEBRUARY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

MARCH

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

APRIL

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

MAY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

JUNE

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

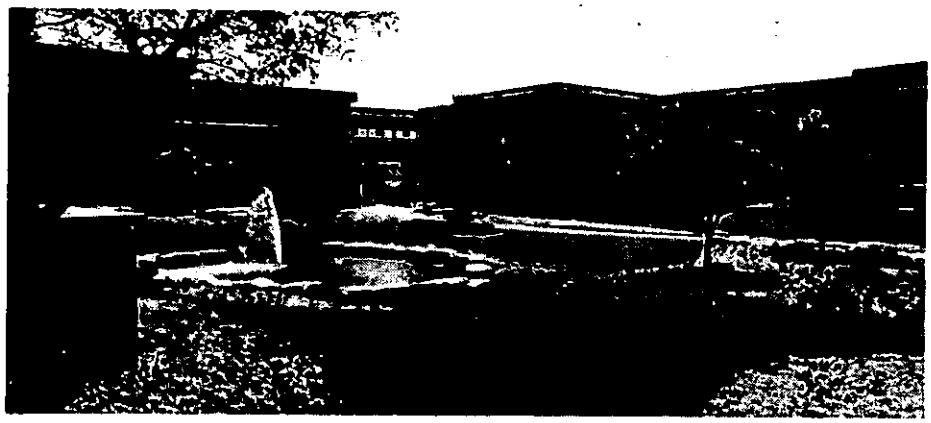
JULY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

AUGUST

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

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.

EVENING AND WEEKEND PROGRAM

The evening and weekend program at Mountain View reflects the District's commitment to serve the needs of a diverse student body. With busy work and family schedules, many people can begin or continue college studies only when evening and Saturday classes are available. For these students, Mountain View offers most courses during the day and also in the evening and on Saturday. Students may select the classes and meeting times most convenient to their schedules, including any combination of day, evening, and Saturday classes.

COMMUNITY COUNCIL

The Community Council of Mountain View College is a coalition of "non-traditional" students which was formed in 1979. The Council defines a non-traditional student as one who has been out of school from "2 to 99 years." Students of all ages comprise the Council which was assembled in an effort to heighten community awareness of what the community college is all about and to lower the anxiety level of students returning to college.

Membership in the Community Council involves training for community outreach and peer counseling. Another option available to Council members is enrollment in a Human Development Leadership Training course offered through Mountain View. The course involves group interaction and leadership training skills as well as preparation for public speaking. The Council works through the Public Information Office on campus in making presentations to community groups on programs and services available at Mountain View College. Persons interested in more information on the Community Council should contact the Office of Student Development and Programs, W-45.

WOMEN'S CENTER

The Women's Center at Mountain View College is designed to serve as a clearinghouse of information and referral services available to students on campus and in the community. Students are welcome to take advantage of the services provided by the Women's Center which include personal and career counseling.

The Center seeks to provide information and resources pertinent to the specific problem solving needs of women returning to school. As a means of meeting these needs, the Women's Center offers a variety of seminars throughout the academic year that deal with such topics as child care, legal aid, tax and credit information, family management, make-up consultation and assertiveness training. These and other support programs are provided in an effort to minimize the barriers for women returning to the college environment. The Women's Center is located in W-46 and is open Monday through Friday from 8:30 a.m. to 3:30 p.m

COGNITIVE STYLE MAPPING

Cognitive Style describes the unique way a given individual learns most effectively. Some individuals learn better by hearing, or by reading, others prefer small group situations, while some enjoy large group instruction. In addition, there are some students who prefer to work at their own pace while others learn more effectively when the pace is set for them.

Over the past seven years, Mountain View College has played a leading role both locally and nationally in developing Cognitive Style Mapping. Approximately 15,000 of the college's students have been individually mapped. Mountain View has also served as a consultant to over 3,500 professionals in the development of cognitive style programs across the nation.

One of the most successful outcomes of the cognitive style program at Mountain View College is the level of awareness developed in instructors. By identifying their own learning style, instructors have become more sensitive to the variety of cognitive styles to be found among their students.

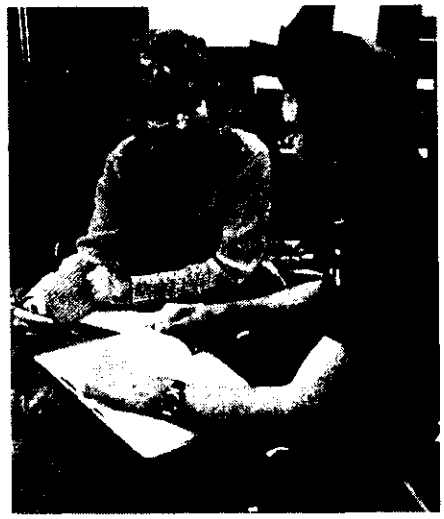
Cognitive Style Mapping holds high promise of helping the educator and student jointly determine the most effective environment for learning by combining information about how the learner gains knowledge with available alternative instruction. For more information concerning the Cognitive Style Mapping program at Mountain View College, contact the Learning Resource Center.

FLEXIBLE ENTRY CENTER

Recognizing that the decision to enter college is not necessarily one which is reached twice a year served as a basis for the establishment of a Flexible Entry Center at Mountain View College. Students may now elect to enter many programs of the college, including technical/-occupational programs and traditional academic subjects, throughout the academic year.

The Flexible Entry Center also makes it possible for a student to enroll for additional course work throughout the semester if, for any reason, he feels it necessary to augment or alter his original schedule.

Courses and programs offered through the Flexible Entry Center are available in a self-paced mode, and make significant use of audio, visual and video instructional materials. All self-paced instruction is under the close supervision of regular Mountain View College faculty and staff. Flexible entry courses are available for both day and evening students.



LEARNING SKILLS CENTER

The Learning Skills Center (LSC) offers instruction in reading, writing, mathematics and study skills to all interested students. Credit for a one-hour course, offered through flexible entry, is granted for completion of work in the LSC. Among the topics of study available in the LSC are time management, improvement of reading speed and comprehension, organizing themes and essays, using proper grammar and mechanics in writing and math and computation skills. A Mountain View College instructor works with each student to decide upon goals and materials with which to accomplish them. Students who are eligible for admission to Mountain View College or its Community Service programs are welcome in the Learning Skills Center. Each semester approximately 400 students participate in the LSC programs. Some are just beginning their college work and come to review basic skills; many come to supplement classroom instruction and others participate for self-improvement. The Learning Skills Center is located in W-176. It is open from 8 a.m. to 9 p.m. Monday through Thursday, 8 a.m. to 3 p.m. Friday.

EDUCATIONAL ALTERNATIVES COURSE

All full-time day students who are enrolling at Mountain View College for the first time are required to enroll in a one credit hour orientation course (Educational Alternatives/HD 100) during their first semester.

NATURE TRAILS

New to Mountain View College is a nature trail area which has been designed to enhance the beauty and interest of approximately forty acres of the northern section of the campus.

The Creek Bottom Trail encompasses approximately a one mile area of the rolling countryside acreage. Over forty-three different woody plants have been identified on the trail which is also equipped with picnic facilities for public use. On the trail, one will find three suspension bridges, one of which gives a scenic overlook of the area. Bird and small animal feeders have been placed along the trail to preserve the natural environment of the animals in the area. A brochure identifying the various plants found along the trail will be provided upon request from the Public Information Office.

Two additional trails, the Woodlands and Prairie Grasslands are scheduled for completion by the end of 1980. Students and community members are welcome to utilize this scenic and interesting area of the Mountain View campus.

AVIATION TECHNOLOGY

Aviation Technology at Mountain View College is designed to allow students to take a core of basic courses and then choose the fields they wish to enter. The options available are Career Pilot (including Flight Instructor Certificate and Multi-Engine Rating), Air Cargo Transport, Airline Marketing, Fixed Base Operations/Airport Management and Aircraft Dispatcher.

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 parts 61 and 141 of the Federal Aviation Regulations, and thus, are subject to change to conform to such regulations. A regularly enrolled student holding an FAA Pilot Certificate and Rating may establish

degree credit by special examination. Admission to this program is by application to the Chief Flight Instructor and should be approved prior to registration and payment of tuition and fees. The student should recognize that simulator, flight fees and fees for pre-and post-flight briefing are in addition to the regular tuition charge.

The Air Cargo Transport option prepares students for entry into the field of Air Cargo Management. Typical employment opportunities include management trainee, support staff member, assistant to an administrator and advisor to station manager.

The Airline Marketing option prepares students for positions as airline or cargo manager trainees in the area of customer service, sales or promotional efforts.

The Fixed Base Operations/Airport Management option prepares students for entry into training positions as fixed base operators, small airport managers, staff members to operation superintendents or aviation authority boards.

The Aircraft Dispatcher option is a one-year certificate program. Entry into this program will be with the instructor's approval in accordance with FAA regulations. On-the-job work experience will be an integral part of the Aircraft Dispatcher program. Upon completion of the courses in this option, the student will be prepared to successfully complete the FAA written exam for Aircraft Dispatcher.

Registration for flight training and certain related courses is open the first Monday of October and November in the fall semester and the first Monday of February and March in the spring semester. Both general academic and associated technical courses are included in the comprehensive program to prepare students for careers in the aviation field.

AVIATION MAINTENANCE TECHNOLOGY

The Aviation Maintenance Technology Program at Mountain View College is designed to provide the student for a career in aircraft maintenance. Such maintenance includes service, repair and overhaul of aircraft, 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 Certificate.

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 Science degree in Aviation Maintenance Technology.

HOROLOGY

Horology is the science of time and timekeeping instruments. In the certificate programs offered at Mountain View College, students study the design, construction and mathematics of individual parts in antique and modern timepieces. The program develops the students' manual dexterity, judgement and skill in the repair and adjustment techniques required to service all types of modern timekeeping mechanisms: watches, clocks, timers and chronographs. Instruction includes the special knowledge necessary to service self-winding, calendar, waterproof, electric and electronic movements. Students also learn to refurbish 400-day clocks, triple-chime clocks and marine and aircraft clocks.

The Horology programs are designed to be self-paced, with students making use of up-to-date innovations in individualized instruction. On the average, a full-time student should plan to spend 18 months completing the program.

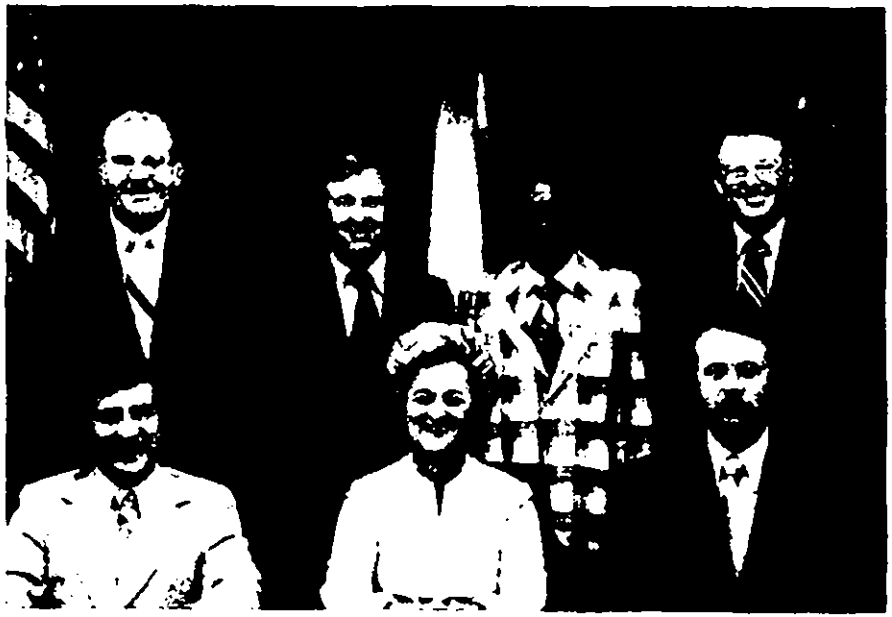
Upon completion of the programs, students may find employment as watchmakers or clockmakers in retail jewelry establishments, in jewelry-chain service centers, in private trade shops, in allied fields where micro-precision skill is essential or as self-employed watch or clock repairers.

MACHINE SHOP

Machine Shop at Mountain View College is a two-year program designed to prepare students for employment as entry-level machinists in industry. An increased demand for machinists is expected as industries use more sophisticated equipment and techinques. In highly mechanized plants, machinist-mechanics are needed for preventive maintenance and repair of machine tools and equipment.

The coursework for the Machine Shop program is designed to allow students to proceed through the program at their own pace but, generally, students should plan to spend 18 months completing the entire course of study. The program includes Cooperative Work Experience that provides a bridge between classroom instruction and on-the-job application.

Employment upon completion of the program may be in the form of an apprentice machinist, an apprentice tool and die maker or a trainee in a specialized area. In addition, machinists may be employed as planners, programmers and/or in other positions in the metal working field.



DALLAS COUNTY COMMUNITY COLLEGE DISTRICT BOARD OF TRUSTEES
Seated from left: Jerry Gilmore, chairman; Pattie T. Powell; Robert H. Power. Standing from left: Bob Beard; Bart Rominger, vice-chairman; J.D. Hall; and Don Buchholz.

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT ADMINISTRATORS

Chancellor	R. Jan LeCroy
Vice Chancellor of Business Affairs	Walter L. Pike
Asso. Vice Chancellor of Business Affairs	Ted Hughes
Vice Chancellor of Educational Affairs	Terry O'Banion
Asso. Vice Chancellor of Educational Affairs	Ruth Shaw
Asst. Chancellor of Planning and Development	Bill Tucker
Special Assistant to the Chancellor	Jan Sanders
Director of Development	Carole Shlipak
Legal Counsel	Robert Young
Director of Computer Services	Jim Hill
Director of Facilities Management	Stan Pritchard
Director of Instructional Television	Rodger A. Pool
Director of Occupational Education	Linda Coffey
Director of Personnel	Quincy Ellis
Director of Planning, Marketing, Research	Colin Shaw
Director of Public Information	Claudia Robinson
Director of Purchasing	Mavis Williams
Director of Relations with Schools and Colleges	Johnyce Alders
Director of Resource Development	Bonny Franke
Director of Technical Services	Paul Dumont

MOUNTAIN VIEW ADMINISTRATIVE STAFF

President	W. H. Jordan	746-4200
Vice President of Business Services	Ralph G. Hall	746-4205
Vice President of Instruction	Corinthian Fields	746-4210
Vice President of Student Services	Jim Horton	746-4196
Dean of Instructional Services	Richard E. Smith	746-4271
Associate Dean, Extended Day Programs	John Nelson	746-4110
Associate Dean, Learning Resources	Jim Corvey	746-4164
Associate Dean, Technical/Occupational Programs	Tom Goza	746-4255
Administrative Assistant to President	Sharron Colburn	746-4178
Director of Admissions/Registrar	Don Gentsch	746-4100
Director of Co-operative Education	William F. Fowler	746-4273
Director of Counseling Services	Bill Wilson	746-4209
Director of Financial Aid	Wilma Robinson	746-4188
Director of Health/Handicapped Services	Donna Richards	746-4199
Director of Public Information	Kathleen Cook	746-4180
Director of Veteran Affairs	Beth Merren	746-4267
Project Manager	Carol Flannery	746-4115
Assistant Director, Community Service	Maggie Whitt	746-4275
Assistant Director, Student Development and Programs	Guy Gooding	746-4185

DIVISION CHAIRPERSONS

Business	Bill R. Sorrells	746-4116
Communications and Technology	Ron Hert	746-4124
Aviation/Fine Arts/Physical Education	Ann Cuningham	746-4132
Science and Mathematics Technology	Clifford Miller	746-4149
Social Science and Technology	Bill Mugleston	746-4156

MOUNTAIN VIEW FACULTY AND STAFF

Affers, Kenneth G. — History
Creighton Univ., B.A., M.A.; George Washington Univ., M.Ph., Ph.D.

Allen, Gemmy — Mid-Management
U.T. 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
Kilgore Jr. College, A.A.; Baylor Univ., B.S., M.S.; North Texas State Univ., Ed.D.

Bean, Al — Government
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.

Breme, Ric — Dance
Studies: Columbia Univ. of Fine Arts Institute; New York Fine Arts Institute

Brown, David L — Drafting
East Texas State Univ., B.S., M.Ed.

Brown, Jean W. — Music
Texas Woman's Univ., B.S., M.A.

Callaway, Curtis — Pilot Technology
F.A.A. Aeronautical Training Center, Certificate; Air Traffic Control Specialist, Certificate; F.A.A.-Certified Advanced Ground Instructor; F.A.A. Certified Instrument Ground Instructor; Synthetic Flight Trainer Instruction; Airplane Flight Instructor; Instrument Flight Instructor

Caldwell, Leleonia E. — Reading
Bishop College, B.S.; Southeastern State College, M.Ed.

Coed, Bruce — English
Wittenburg Univ., B.A.; Univ. of North Carolina, M.A.; Duke Univ., Ph.D.

Cook, Kathleen — Director, Public Information
Univ. of Texas at Austin, B.J.

Cook E. Wayne — English
Hardin-Simmons Univ., B.A.; Texas Tech Univ., M.A., Ph.D.

Cortez, Lionel M., Jr. — Counselor
Univ. of Texas at Austin, B.A.; Our Lady of the Lake College, M.Ed.; Nova Univ., Ed.D.

Corvey, Sanford James — Assoc. Dean, Learning Resources
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, Aliatia — Speech
North Texas State Univ., B.A., M.A.

Cunningham, Ann R. — Chairman, Aviation/Fine Arts/Physical Education
Baylor Univ., B.S., M.S.

DeLong, J. Richard — Developmental Mathematics
Southern Methodist Univ., B.A.; North Texas State Univ., M.Ed.

Dexter, Rawlins P. — English
Colorado State Univ., B.A., M.A.

Dodge, Tom — English
Univ. of Texas, Arlington, B.A.; North Texas State Univ., M.A.

Duvall, Johnny W. — Mathematics
East Texas Univ., B.S.; Univ. of Illinois, M.A.

Edwards, Annie — Counselor
Prairie View A&M College, B.S., M.Ed.; Nova Univ., Ed.D.

Ehrhardt, Harryette 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.

Felty, 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 Instruction
Univ. of Massachusetts, B.S., Ed.D.; Western New England College, M.B.A.

Flannery, Carol A. — Project Manager
Univ. of Texas, Arlington, B.S.

Fletcher, Ann — Educational Paraprofessional
DePauw Univ., B.A.; Univ. of Houston, M.Ed.

Forrest, Patricia — Art
North Texas State Univ., B.F.A., M.F.A.

Fowler, William F. — Director, Co-Operative Education
Baylor Univ., B.A., M.A.; East Texas State Univ., M.S.

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 — Assistant Director, Student Development and Programs
Texas Tech Univ., B.A.; North Texas State Univ., M.Ed.

Goss, Raye — Financial Aid Counselor
Prairie View A&M College, B.S.; East Texas State Univ., M.S.

Goza, Tom — Associate Dean, Technical/Occupational Programs
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
Baylor Univ., B.A., M.A.

Hall, Ralph G. — Vice President of Business Services
Southeastern State Univ., B.S.

Hamilton, Ramona — Office Careers
Hardin-Simmons Univ., B.B.A.; North Texas State Univ., M.B.E.

Hegar, Kathryn W. — Business
North Texas State Univ., B.B.A., M.B.E., Ph.D.

Hert, Ron — Chairman, Communications
Univ. of Nebraska, B.A.; Illinois State Univ., M.A.

Hettle, Mark — Music
North Texas State Univ., B.M., M.Ed.

Holland, Ronald C. — Physical Education
Northeastern State College, B.S.; East Texas State Univ., M.Ed.

Horton, Jim — Vice President of Student Services
Univ. of Illinois, B.S., M.Ed.

Jordan, W.H. — President
North Texas State Univ., B.S., M.E., Ed.D.

Kavalier, Jim — Counselor
Univ. of Oregon, B.S., M.S.

Korman, Frank — Supervisor, Media Services
Texas Christian Univ., B.B.A.; Univ. of Texas, Austin, M.A., Ph.D.

Legg, Larry — Biology
Univ. of Southern Mississippi, B.S.; Northwestern Louisiana State Univ., M.S.

Lockley, J. Elaine — Mathematics
Wiley College, B.S.; Texas Southern Univ., M.S.; Stanford Univ., M.S., Ph.D.

Lovelace, Curtis — Electronics
Mountain View College, Assoc. Applied Science

McCain, Charles — Resources Consultant
East Texas State Univ., B.S., M.S., Ph.D.

McLoda, William S. — Geology/Geography
Ohio State Univ., B.S.; Indiana Univ., M.A.T.

Means, Richard L. — History
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.

Merren, Beth — Director, Veteran Affairs
Southern Methodist Univ., B.A.

Miller, Clifford D. — Chairman, Science and Technology
Wayne State Univ., B.S.; Washington Univ., M.A.; Univ. of Kentucky, Ph.D.; Studies: Max Planck Institut

Mount, George — Psychology
Univ. of Texas, Arlington, B.A.; North Texas State Univ., M.S., Ph.D.

Mugleston, Bill — Chairman, Social Science and Technology
Johns Hopkins Univ., B.A.; Univ. of Virginia, M.A.; Univ. of Georgia, Ph.D.

Nelson, John — Associate Dean, Extended Day Programs
Huston-Tillotson College, B.A.; Univ. of Denver, M.A.

O'Connor, Linda — Biology
Univ. of Texas at Austin, B.A.; Southern Methodist Univ., M.A.

Ohlhausen, Orlan — Mathematics
Abilene Christian Univ., B.A., M.A.

Olesen, Spencer — Reading
Stephen F. Austin State Univ., B.A.; East Texas State Univ., M.Ed.

Oliver, Gwendolyn L. — Supervisor, Library Services
Texas Woman's Univ., B.A.; North Texas State Univ., M.L.S.

Oxsheer, Billy W. — Sociology
Texas Christian Univ., B.A., M.A.

Payne, John — Aviation
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

Penn, Howard L. — Mathematics
Southeastern State College, B.S.; North Texas State Univ., M.S., Ph.D.

Pierce, L. Jack — Biology
Sam Houston State Univ., B.S., M.A.; Texas A&M Univ., Ph.D.

Pike, Patsy — Office Careers
Baylor University, B.B.A.; East Texas Univ., M.B.A.

Pool, Larry — History
Stephen F. Austin State Univ., B.S., M.A.

Pritchett, John L. — Economics
Southern Methodist Univ., B.A.; North Texas State Univ., M.S.

Rawlins, J.C. — Electronics
Southern Methodist Univ., B.S.E.E.; East Texas State Univ., M.S.Ed.

Richards, Donna — Director, Health Center
Texas Woman's Univ., B.S., M.S.

Roberts, Mary — Business
Louisiana State Univ., B.S.; Southern Methodist Univ., M.B.A.

Robinson, Wilma W. — Director, Financial Aid
Savannah State College, B.S.; East Texas State Univ., M.S.

Rodgers, Samuel A. — Mathematics
North Texas State Univ., B.A., M.S.; Univ. of Kentucky, Ph.D.

Roy, Dwayne — Welding
Studies: Oscar Rose Junior College; Eastfield College

Salter, Daniel M. — Pilot Technology
San Jacinto College, A.S.; F.A.A. Commercial Pilot Certificate; F.A.A. Flight Instructor Ratings; F.A.A. Ground Instructor Rating; F.C.C. Radio Operator License; Dallas Baptist College, B.C.A.

Salter, M. Jo — Counselor
Southwestern Univ., B.A.; East Texas State Univ., M.S.

Sayers, Lew Carey — Developmental Writing
Dartmouth College, B.A.; Reed College, M.A.T.

Schimmel, David — Music
Oklahoma Univ., B.S.; Florida State Univ., M.S.; North Texas State Univ., M.M.

Schlehr, George — Horology
Oswego State Teachers College, B.S.; American Watchmakers Institute, C.M.W.

Sherman, Bill — Counselor
East Texas State Univ., B.S., M.Ed.

Singleton, Emma — Office Careers
Texas Southern Univ., B.S., M.B.Ed.

Sink, Donald Michael — English
Ball State Univ., B.S., M.A.; Auburn Univ., Ed. D.

Skinner, Ted R. — Librarian
East Texas State Univ., B.S., M.S. in L.S.

Smith, Richard E. — Dean of Instructional Services
Harding, B.A.; Univ. of Texas at Austin, M.A.

Smith, Tommy E. — Physical Education
North Texas State Univ., B.S., M.Ed.; Nova Univ., Ed.D.

Sorrells, Bill R. — Chairman, Business Division
East Texas State Univ., B.S., M.Ed.

Strain, Jimmie F. — Government, History
Univ. of Texas at Austin, B.S.; East Texas State Univ., M.A.; Southern Methodist Univ., M.L.A.

Stupp, Mary — Philosophy
El Centro College, A.A.; North Texas State Univ., B.A., Southern Methodist Univ., M.L.A.

Terry, Joanne — Coordinator, Testing Center
Texas Lutheran College, B.S.; Texas Tech Univ., M.A.

Thompson, Darrell H. — Mid-Management
Sam Houston State Univ., B.B.A., M.B.A.

Tipple, Karl — Electronics
Southern Methodist Univ., B.S., M.S.

Walsh, John — Machine Shop
Studies: Univ. of Texas at Arlington; UT Austin, Extension Voc. Teaching Cert.; Texas A&M Egr. Extension-Voc. Teaching Cert.

Washington, Billie — Counselor
Studies: Mountain View College; East Texas State Univ.

White, Marjorie A. — Chemistry
Our Lady of the Lake College, B.A.; Univ. of Texas at Austin, M.A., Ph.D.

Whitefield, Geneva — Mid-Management
Univ. of Arkansas, B.S.B.A.; East Texas State Univ., M.B.A.

Whitt, Maggie — Asst. Director of Community Service
DePauw Univ., B.A.

Wickersham, Charles H. — Developmental Mathematics
North Texas State Univ., B.B.A.; East Texas State Univ., M.S.

Williams, Mollie Ann — Counselor
Prairie View A&M College, B.S.; East Texas State Univ., M.S.; Nova Univ., Ed.D.

Willis, John A. — Mid-Management
Univ. of Arkansas, B.S.; North Texas State Univ., M.B.A.

Wilson, Bill — Director, Counseling
The City College of the City Univ. of New York, B.A.; Teachers College, Columbia Univ., M.A., Ed.D.

Wilson, Rodney M. — Theatre
Northern Iowa Univ., B.A.; Kansas State Univ., M.A.

Wolfe, David J. — Journalism
Southern Methodist Univ., B.A.; Univ. of California at Los Angeles, M.A.

General Information

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

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 16 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:

a. Graduates from an accredited high school or those who have earned a General Education Diploma (G.E.D.)
b. Graduates of an unaccredited high school who are 18 years of age or older.
c. 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.
d. High school students 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:

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

Contact the Admissions Office for further 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:

a. An official application, available from the Admissions Office.
b. 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.
c. 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 diptheria/tetanus injection within the last 10 years. This medical proof is required by state law (Senate Bill 27).

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:** $35 for one hour per week (maximum) for one course, $20 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: Fee of $20 per examination per course.**

---

* 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	40	1	41
2	25	2	27	40	2	42	80	2	82
3	25	3	28	60	3	63	120	3	123
4	28	4	32	80	4	84	160	4	164
5	35	5	40	100	5	105	200	5	205
6	42	6	48	120	6	126	240	6	246
7	49	7	56	140	7	147	280	7	287
8	56	8	64	160	8	168	320	8	328
9	63	9	72	180	9	189	360	9	369
10	70	10	80	200	10	210	400	10	410
11	75	10	85	205	10	215	440	10	450
12	80	10	90	210	10	220	480	10	490
13	85	10	95	215	10	225	520	10	530
14	90	10	100	220	10	230	560	10	570
15	95	10	105	225	10	235	600	10	610
16	100	10	110	230	10	240	640	10	650
17	105	10	115	235	10	245	680	10	690
18	110	10	120	240	10	250	720	10	730
19	115	10	125	245	10	255	760	10	770
20	120	10	130	250	10	260	800	10	810

TUITION SCHEDULE FOR SUMMER SESSIONS,

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 Dallas County Community College District Board of Trustees has waived the difference in the rate of tuition for non-resident and resident students for a person or his dependent, who owns property which is subject to ad valorem taxation by the District.

**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; (2) a student who is less than eighteen (18) years of age whose parents do not live in Dallas County.

***A non-resident student is hereby defined to be a student less than eighteen (18) years of age living away from his family and whose family resides in another state, or whose family has not resided in Texas for twelve (12) months immediately preceding the date of registration; or a student of eighteen (18) years of age who resides out of the state or who has not been a resident of the state twelve (12) months.

These definitions are intended as a guideline for the student. The student is referred to the Director of Admissions for a more complete definition.

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 Petiton 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 payment is returned, the student's enrollment is considered void.

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 is granted by the District college at which the student took the last 15 hours or where the majority of hours were accrued.
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 or 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.

As a general rule, when absences become so excessive as to endanger the student's class standing, the instructor will file a drop notice. 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". 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.

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
P	Progress	Not Computed
F	Failing	0 points
I	Incomplete	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:
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.

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.

The "P" grade (Progress) may be awarded when a student has attended class regularly and the instructor has evidence that the student has made significant progress toward meeting course objectives, but the student has not met those objectives at a level appropriate for a performance grade (A-F). "P" grade may be computed as an "F" grade at some receiving colleges and universities. To earn credit for a course in which the student has a "P" grade, the student must re-enroll in that course.

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. The Honor Roll, the Vice President's Honor List, and the Academic Recognition List are published each semester.

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 scholatic 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. The first two requests for a transcript are filled without charge. Later requests are filled for a $1 charge.

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.

INSTRUCTORS

The faculty is comprised of outstanding professional educators who were chosen as a result of their recognized accomplishments as educators, business leaders, government leaders, and community leaders. All share with students the knowledge and practical insight gained from years of experience in successful careers and avocations.

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 of $22.00 per 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 must be earned in residency. 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.
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 transcripted 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.

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 divisions 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.

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. 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.

BEOG GRANT

The BEOG 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 BEOG Grant. Other types of financial aid may be awarded if the student applies and qualifies. Eligibility for BEOG Grant is based on "financial need" and satisfactory academic progress. Applications and additional information concerning the BEOG Grant Program are available in the Financial Aid Office and in the counseling offices of most high schools. The application process takes approximately four to six weeks. In response to the BEOG Grant application, a Student Eligibility Report (SER) will be mailed directly to the student. The student should immediately review the SER to make sure it is correct and bring it to the

Financial Aid Office. The exact amount of the BEOG Grant award will depend upon the eligibility index on the SER 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. The SEOG must be matched by other sources of aid, such as BEOG, College Work/Study Program, private scholarships, etc. To be eligible, students must enroll for a 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 their 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 GRANT STATE STUDENT INCENTIVE GRANT (TPEG-SSIG)

The TPEG-SSIG is a State program. To qualify, students must enroll and remain in 12 credit hours per semester, make satisfactory progress toward their educational goal, be enrolled in an undergraduate course of study (not possess a bachelor's or graduate degree), be a Texas resident, and have financial need. Grants are awarded by eligibility on a first-come, first-served basis. Students must apply each year for the TPEG-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.

Repayment begins nine to twelve 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 $30 a month is required. The interest rate is 7% 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 offers benefits to students who meet its criteria. The Admissions Office acts as liaison between students and the Social Security Administration. Students need to contact the regional Social Security Administration Office regarding eligibility.

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. For further 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.

HAZLEWOOD ACT

Under the Hazlewood 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 service, have an honorable discharge and must now be residents of Texas. To apply, students must submit a Hazlewood Act application and a copy of their discharge papers to the Financial Aid Office.

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.

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.

VII. STUDENT CODES AND EXPECTATIONS

1. General Provisions

a. Purpose

(1) A student at a college of the Dallas County Community College District neither loses the rights nor escapes the responsibilities of citizenship. He is expected to obey both the penal and civil statutes of the State of Texas and the Federal Government and the Board of Trustees rules, college regulations and administrative rules. He may be penalized by the college for violating its standards of conduct even though he is also punished by State or Federal authorities for the same act.

(2) This code contains regulations for dealing with alleged student violations of college standards of conduct in a manner consistent with the requirements of procedural due process. It also contains descriptions of the standards of conduct to which students must adhere and the penalties which may be imposed for the violation of those standards.

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.

2. Standards of Conduct

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. 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. On withdrawal from school, a student must return his I.D. card to the Registrar's Office.

(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 a 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. Thus, reasonable controls are exercised by college officials of 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 the 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.

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 purpose 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) Gambling: State law expressly forbids gambling of any kind on State property.
(7) Hazing: Each college of the Dallas County Community 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 these activities as escape from reasonable control, regulation, and decency. From the institutions'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 itself 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.
(8)Scholastic Dishonesty:

(a) The Vice President of Student Services may initiate disciplinary proceedings against a student accused of scholastic dishonesty.
(b) "Scholastic 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 in one's own written work offered for credit.
(e) "Collusion" means the unauthorized collaboration with another person in preparing written work for credit.

(9) Financial Transactions with the College:

(a) No student may refuse to pay or fail to pay a debt he owes to the College.
(b) No student may give the College a check, draft or order with the 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 day 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.

(10) 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 preformance 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.

3. 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 allegation as unfounded, either before or after conferring with the student; or
(ii) Proceed administratively under 3(a) 3(d); 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 authorized as 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 under 3(a)(3).

(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 under 3(b) of this code. 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 to 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 4a(1) through (8) of this code.
(ii) For major violations, any action authorized by 4a of this code.

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 third day following administrative disposition. The Committee shall be composed of any three administrative officers of the College. The Committe 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 three 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 Chariman 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 3c(1)(a) of this code.
(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 occurence, against one or more students, may be heard together or, either at the option of the Committee or the 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 shall 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 members 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 Chariman, 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.

c. Faculty-Student Board of Review

(1) Right to Appeal:

(a) In those cases in which the disciplinary penalty imposed was as prescribed in 4a(6) through (11), the student may appeal the decision of the Student Discipline Committee, or the decision of the President in an interim action under 3a(1)(b) to the Faculty-Student Board of Review. Disciplinary actions taken under 4a(1) through (5) 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 interium action may be taken as authorized under 3a(1)(b).

(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 students 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 Chariman

(d) Appellate hearings will follow the procedure prescribed in 3b of 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 by 3c(1)(a), 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. If the Chancellor rejects the petition, and the student appellant wishes to petition the Board of Trustees, he shall file the petition with the Chairman of said Board on or before the third class day after the day the Chancellor 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, under 3a, or the Student Discipline Committee, under 3b, or the Faculty-Student Board of Review, under 3c, 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) Explusion from the College

b. Definitions: The following definitions apply to the penalities provided in 4a

(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

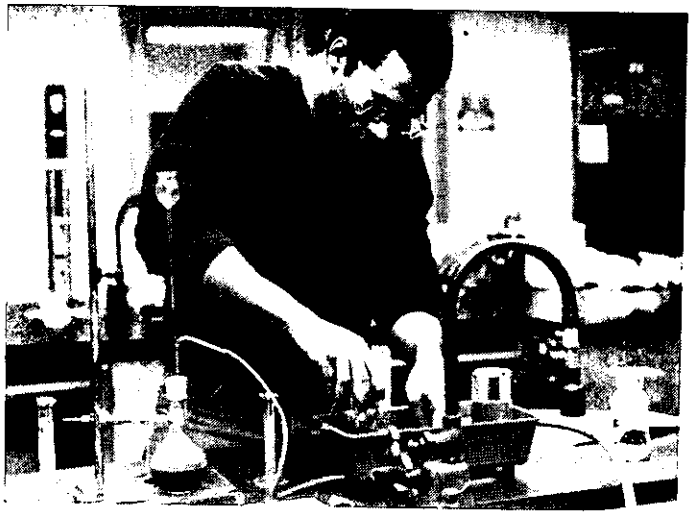
(8) "Denial of degree" may be imposed on a student found guilty of scholastic dishonesty and may be imposed for any length of time up to and including permanent denial

(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 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.

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 (3LEC.)

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) 118 (3)
CREATIVE PHOTOGRAPHY FOR THE ARTIST I (2 LEC., 4 LAB.)

Prerequisites: Art 110, Art 114, or the consent of the instructor. Creative use of the camera is studied. Photosensitive materials are examined as a means of making expressive graphic images. Emphasis is black and white processing and printing techniques. 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.

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, meterology, 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)

Prerequsite: 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) 222 (3)
TRANSPORTATION, TRAFFIC AND AIR CARGO (3 LEC.) (48 CONTACT HOURS)

Prerequisites: Required core courses and credit or concurrent enrollment in Business 136. Transportation methods of passengers and cargo are examined. Emphasis is on the diagnosis and solution of problems at terminals. Topics include air cargo, air mail, air express, and air freight. The nature of automation and future trends are also covered.

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 instruciton (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) 248 (3)
AIR TRANSPORTATION (3 LEC.) (48 CONTACT HOURS)

Prerequisite: Aviation Technology 110. This course is a study of the need, nature, and structure of the air transportation segment of the aviation industry. It includes passengers and cargo in both domestic and international travel. Topics cover kinds of transportation, such as air carrier, air-taxi, commuter, business, and pleasure. Basic costs and revenue sources are explored. Legal issues and future trends are described.

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) 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.) (64 CONTACT HOURS)

This course introduces the aircraft and the nature of flight. Emphasis is on electronic systems and their function and operation. Laboratory fee.

AVIONICS TECHNOLOGY (AV) 132 (4)
MATERIALS, TOOLS, AND INSTALLATION TECHNIQUES AND PRACTICES (3 LEC., 3 LAB.) (96 CONTACT HOURS)

This course is designed to acquaint the student with a variety of acceptable materials available for use in avionics installations and the correct tools and techniques applicable to quality, reliability, safety, and longevity in such installations. Laboratory fee.

AVIONICS TECHNOLOGY (AV) 235 (4)
CHECKOUT, TROUBLE-SHOOTING AND RELATED TEST APPARATUS (3 LEC., 3 LAB.) (96 CONTACT HOURS)

This course incorporates a combination of technical drawing interpretation, wiring interface checkout, and application of checkout test apparatus to the level of some ramp test equipment in common usage. 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.)

This coures 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. No science background is presupposed. Major topics include cell structure and function, organization of the body, tissues, organs, the blood and cardiovascular system, and the respiratory system. Emphasis is on homeostasis. Laboratory fee.

BIOLOGY (BIO) 121 (4)
INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY (3 LEC., 3 LAB.)

Prerequisites: Biology 120. This course is a continuation of Biology 120. Major topics include the neuro-muscular, digestive, excretory, and endocrine systems. 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) 216 (4)
GENERAL MICROBIOLOGY (3 LEC., 4 LAB.)

Prerequisite: Biology 102 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 the skeletal, muscular, and circulatory systems as related to humans. Emphasis is on structure, function, and the interrelationships of the 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 digestive, nervous, respiratory, reproductive, and endocrine systems. Emphasis 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 multiview 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.)

Prerequisite: Developmental Mathematics 093 or the 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)
GENERAL CHEMISTRY (3LEC., 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 expain 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)
GENERAL CHEMISTRY (3 LEC., 3 LAB.)

Prerequisite: Chemistry 115. This course is for non-science majors. It covers oganic 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) 175 (3)
INTRODUCTION TO COMPUTER SCIENCE (3 LEC.)

This course is an introduction to the computer. The history of computers and their cultural impact are explored. Topics include vocabulary, flow charting, data representation, and procedure-oriented languages with general applications.

COMPUTING SCIENCE (CS) 176 (3)
FORTRAN PROGRAMMING (2 LEC., 2 LAB.)

Prerequisite: Mathematics 101 or Data Processing 137. This course provides programming skills for students who need to use the computer in their curriculum, particularly those in the math and science disciplines. Laboratory fee.

COMPUTING SCIENCE (CS) 240 (4)
TELECOMMUNICATIONS I (3 LEC., 4 LAB.)

Prerequisite: A minimum of 2 semesters of a high level language and credit in Data Processing 232, 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.

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

Prerequisite: A minimum of two semesters of a high level language, or employment in the computer industry and the consent of the instructor. Recent developments and topics of current interest are studied.

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

Prerequisite: Completion of at least one semester of any of the 5 data processing curriculum options, or employment in the computer industry and the consent of the instructor. Current developments in the rapidly changing field of computer science and data processing are studied. Topics will vary each semester, but may include such areas as basic programming for small computer systems, advanced RPGII concepts, PL/1 programming, or advanced data entry concepts. 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 (2 LAB.)

This course supplements beginning dance technique 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 excercises 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: Business 172 or one year of typing in high school. This course provides skills using card-oriented and 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 and multiple program levels are also covered. Laboratory fee.

DATA PROCESSING (CS) 131 (3)
RPG PROGRAMMING (2 LEC., 2 LAB.)

Prerequisite: Data Processing 133 or the consent of the instructor. This course is for persons who require RPGII in job. Programming skills using RPGII are developed. Emphasis is on language techniques and not on operation and functioning of the equipment. Programming problems emphasize card processing, and will include basic listing, multicard records, and multi-file processing. Laboratory fee.

DATA PROCESSING (DP) 133 (4)
BEGINNING PROGRAMMING (3 LEC., 4 LAB.)

Prerequisites: Data Processing 139 and 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. Programs are designed to provide competency using cards. Laboratory fee.

DATA PROCESSING (DP) 136 (4)
INTERMEDIATE PROGRAMMING (3 LEC., 4 LAB.)

Prerequisites: Data Processing 133 and Data Processing 138. 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.)

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)
DATA PROCESSING LOGIC (3 LEC.)

Prerequisites: Data Processing 139 and 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) 231 (4)
ADVANCED PROGRAMMING (3 LEC., 4 LAB.)

Prerequisite: Data Processing 136 or the consent of the instructor. This course focuses on the additional language capabilities and third generation hardware concepts. The assembly language instruction set of the IBM 360/370 is used. Included is an in-depth study of the standard instruction set and the decimal feature instructions. Data structure, system organization, linkage conventions, and selected macro-instructions are also presented. Laboratory fee.

DATA PROCESSING (DP) 232 (4)
APPLIED SYSTEMS (3 LEC., 4 LAB.)

Prerequisite: Data Processing 136. 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) 236 (4)
ADVANCED COBOL TECHNIQUES (3 LEC., 4 LAB.)

Prerequisite: Data Processing 133 and 136, or the consent of the instructor. Advanced problem solving techniques are studied using the COBOL programming language. Emphasis is placed on sequential and random processing techniques using disk. Additional ANSI COBOL conventions are covered. Set/search table lookup, sort verb, report writer, and modular programming techniques are included. Laboratory fee.

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

This course focuses on strengthening language communications. Topics include grammer, 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.) (64CONTACT 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) 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 diagramatic 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) 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.

EDUCATIONAL PARAPROFESSIONAL (EP) 129 (3)
COMMUNICATIONS SKILLS FOR EDUCATIONAL PARAPROFESSIONAL (3 LEC.)

This course surveys methods for developing the language skills of students. Topics include creative writing, story telling, appreciation of literature, tutoring, cursive and manuscript handwriting, and listening skills.

EDUCATIONAL PARAPROFESSIONAL (EP) 131 (3)
INTRODUCTION TO EDUCATIONAL PROCESSES I (3 LEC.)

The role of the Educational Paraprofessional is defined. The organization and administration of the public school system are described. Special attention is given to the development of effective interpersonal relationships. Through direct experiences with students on a one-to-one basis, the paraprofessional trainee observes and studies the developmental patterns of students. The principles of human growth and development are included.

EDUCATIONAL PARAPROFESSIONAL (EP) 133 (3)
INTRODUCTION TO EDUCATIONAL PROCESSES II (3 LEC.)

This course focuses on developing a wholesome learning environment in the classroom. The facilitation of learning in small groups is emphasized. Factors affecting the growth and development of students in a pluralistic society are covered. The responsibilities of the Educational Paraprofessional are covered.

EDUCATIONAL PARAPROFESSIONAL (EP) 134 (3)
INTRODUCTION TO MEDIA (2 LEC., 2 LAB.)

Basic skills for preparing graphic and projected educational materials are developed. The operation of selected audiovisual equipment is also included. ECC, MVC, RLC ONLY

EDUCATIONAL PARAPROFESSIONAL (EP) 135 (3)
ARTS AND CRAFTS FOR EDUCATIONAL PARAPROFESSIONALS (3 LEC.)

Creative art materials and methods used in programs for children are presented. Opportunities are provided for the use of these materials. Classroom displays, charts, poster art, and bulletin boards are included. Emphasis is on creating an attractive environment in the classroom.

EDUCATIONAL PARAPROFESSIONAL (EP) 247 (3)
DIVERSIFIED STUDIES (3 LEC.)

This course provides for specialized study by the Educational Paraprofessional. Possible areas for study are special education, bilingualism, child development, educational media, library, physical education, counseling, and health services. Other areas may be approved by the instructor.

EDUCATIONAL PARAPROFESSIONAL (EP) COOPERATIVE WORK EXPERIENCE
701, 711, 801, 811 (1)
702, 712, 802, 812 (2)
703, 713, 803, 813 (3)
704, 714, 804, 814 (4)

ELECTRONICS TECHNOLOGY (ET) 135 (6)
DC - AC THEORY AND CIRCUIT ANALYSIS (5 LEC., 3 LAB.) (128 CONTACT HOURS)

Prerequisites: Credit or concurrent enrollment in Mathematics 195 or the equivalent. The DC theory and AC theory are both studied in this course. 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 combination circuits are covered. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 190 (4)
DC CIRCUITS AND ELECTRICAL MEASUREMENTS (3 LEC., 3 LAB.) (96 CONTACT HOURS)

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., 96 CONTACT HOURS)

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.) (80 CONTACT HOURS)

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.) (96 CONTACT HOURS)

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.) (96 CONTACT HOURS)

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.) (96 CONTACT HOURS)

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.) (96 CONTACT HOURS)

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.) (96 CONTACT HOURS)

Prerequisites: Electronics Technology 232. Read only memories (ROM's), random acess memories (RAM's), and microprocessors are presented. Emphasis is on specifications, applications, and operation. Control buses data basis, 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.) (96 CONTACT HOURS)

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)
INDUSTRIAL AND MICROWAVE ELECTRONICS TECHNOLOGY (3 LEC.)

Prerequisites: Electronics Technology 194 and 231. The microwave portion of this course involves a study of U.H.F. and V.H.F. components, circuits, and measurement techniques including the use of distributed constant-element waveguides, microwave links, and an introduction to radar and similar systems. The industrial electronics portion of this course involves a study of time constant and electronic timing circuits, photoelectric controls, synchros and servomechanisms, induction and dielectric heating, radiation detention, applications in the field of industrial control and automation, combining of electrical, electronic, magnetic, and mechanical principles. MVC ONLY

ELECTRONICS TECHNOLOGY (ET) 240 (4)
ELECTRONICS THEORY AND APPLICATION OF DIGITAL COMPUTERS (3 LEC., 3 LAB.)

Prerequisite: Mathematics 196 and Electronics Technology 193. This course is designed primarily to provide related theory and applications of electronic switching circuits to digital computer systems. Logic symbology, gates, and related boolean algebra to predict the output of such circuits are presented. An overview of general computer terminology and number systems is provided. APL programming with respect to basic electronic circuit analysis is also included. Laboratory fee. MVC ONLY

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 equilbrium, 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. Signigicant 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 grammer 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) 202 (3)
INTRODUCTION TO ROCK AND MINERAL IDENTIFICATION (1 LEC., 3 LAB.)

Prerequisites: Geology 101 and Geology 102. This course introduces crystallography, geochemistry, descriptive mineralogy, petrology, and phase equilibria. Crystal models and hand specimens are studied as an aid to rock and mineral identification. Laboratory fee.

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

Prerequisite: Geology 101 and/or Geology 102 or concurrent enrollment in Geology 101 or 102. Geological features, landforms, rocks, 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 constitional 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 repeatred 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.)

Prerequisite: History 101 recommended. This course is a continuation of History 101. 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, the 19th century, the 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, hairspring 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)
BASIC PROCESSES OF INTERPERSONAL 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.

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. Beginning reporting is presented. Topics include types of news, leads, body treatment of a story, feature in the lead, facts, and background. A practice in writing straight news stories is provided.

JOURNALISM (JN) 103 (3)
NEWS GATHERING AND WRITING (2 LEC., 3 LAB.)

Prerequisite: Journalism 102. This course is a continuation of Journalism 102. Complex news stories are written. Specialized writing is covered for sports, police news, markets, finance, society, amusements, government, and women's stories. Laboratory work on the student newspaper is required.

JOURNALISM (JN) 104 (1)
STUDENT PUBLICATIONS (3 LAB.)

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. This course may be repeated for a total of three credits.

JOURNALISM (JN) 105 (1)
STUDENT PUBLICATIONS (3 LAB.)

This course may not be taken for credit concurrently with Journalism 102 or 103. The course is a continuation of Journalism 104.

JOURNALISM (JN) 201 (3)
EDITORIAL AND FEATURE WRITING (3 LEC.)

Prerequisites: 6 hours of journalism or the consent of the instructor. This course covers difficult news stories, editorials, and features. Research, interviewing techniques, and the development of feature stories for use in newspapers and magazines are emphasized.

JOURNALISM (JN) 202 (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)203 (1)
STUDENT PUBLICATIONS (3 LAB.)

This course may not be taken for credit concurrently with Journalism 102 or 103. The course is a continuation of Journalism 202.

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) 813 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 approved Management Program. This course provides for supervised employment in the student's chosen field. It gives practical experience to students preparing for careers in business management.

MANAGEMENT (MGT) 151 (4)
MANAGEMENT TRAINING (20 LAB.)

Prerequisite: Concurrent enrollment in approved Management Program. This course is a continuation of Management 150. It provides for supervised employment in the student's chosen field.

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.)

Prerequisites: Concurrent enrollment in Management 150 and preliminary interview by Management faculty. This course is for students majoring in Management. Emphasis is on the development of management skills, goal-setting, planning, leadership, communication, and motivation as applied to the student's work experiences.

MANAGEMENT (MGT) 155 (2)
MANAGEMENT SEMINAR:
PERSONNEL MANAGEMENT (2 LEC.)

Prerequisites: Management 150 and 154 and concurrent enrollment in Management 151. The principles, policies, and practices of the personnel function as applied to the student's work experiences are studied.

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.)

Prerequisites: Management 150 and Management 151; concurrent enrollment in Management 254. This course consists of supervised employment in the student's chosen field. It is intended to provide increased supervisory responsibility for students preparing for careers in business management.

MANAGEMENT (MGT) 251 (4)
MANAGEMENT TRAINING (20 LAB.)

Prerequisites: Management 150 and 151; concurrent enrollment in Management 255. This course continues Management 250. It is intended to provide supervised employment in the student's chosen field.

MANAGEMENT (MGT) 254 (2)
MANAGEMENT SEMINAR:
ORGANIZATIONAL
DEVELOPMENT (2 LEC.)

Prerequisites: Management 151 and Management 155; concurrent enrollment in Management 250. Organizational objectives and management of human resources are studied. The various approaches to organizational theory are applied to the student's work experience.

MANAGEMENT (MGT) 255 (2)
MANAGEMENT SEMINAR:
BUSINESS STRATEGY, THE
DECISION PROCESS AND
PROBLEM SOLVING (2 LEC.)

Prerequisites: Management 250 and Management 254; concurrent enrollment in Management 251. Business strategy and the decision-making process are applied to the first-line supervisor and middle-management positions. Emphasis is on applying the student's course knowledge to work experience.

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) 107 (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 toward a minor or major in computer science. It includes a study of algorithms and an introduction to a procedure-oriented language with general applications.

MATHEMATICS (MTH) 111 (3)
MATHEMATICS FOR BUSINESS
AND ECONOMICS I (3 LEC.)

Prerequisite: Two years of high school algebra or Developmental Mathe-

matics 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 trancendental 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) 196 (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) 207 (3)
FORTRAN PROGRAMMING WITH APPLICATIONS (3 LEC.)

Prerequisites: Mathematics 107 or equivalent and Mathematics 101 or Mathematics 111 or Mathematics 104 or its equivalent. This course is a study of Fortran with emphasis on applications and programming of algorithmic language to solve numerical problems. Writing, testing, and executing typical Fortran programs are stressed. Emphasis is on applications for majors and minors in engineering, the sciences, mathematics, or business.

MATHEMATICS (MTH) 209 (3)
INTRODUCTORY APL PROGRAMMING (3 LEC.)

Prerequisites: Mathematics 101 or Mathematics 104 or Mathematics 111 and Mathematics 107 or consent of instructor. This course is a study of APL with emphasis on applications. It is designed for partial fulfillment of degree requirements in computer science.

MATHEMATICS (MTH) 222 (3)
CALCULUS I (3 LEC.)

Prerequisite: Mathematics 121. This course includes limits, continuity, differentiation of algebraic and transcendental functions, and applications, maxima and minima, antiderivatives and indeterminate forms.

MATHEMATICS (MTH) 223 (3)
CALCULUS II (3 LEC.)

Prerequisite: Mathematics 222. This course includes the indefinite integral, definite integral, and applications, techniques of integration, improper integrals, and infinite series.

MATHEMATICS (MTH) 224 (3)
ADVANCED CALCULUS (3 LEC.)

Prerequisite: Mathematics 223. This course includes multiple integrals, partial differentiation, vector analysis, series and hyperbolic functions.

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.

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 civiliazation, 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 repeatd 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) 159 (4)
BEGINNING SHORTHAND (3 LEC , 2 LAB)

Prerequisite: Credit or concurrent enrollment in Office Careers 172 or one year of typing in high school. The principles of Gregg Shorthand (Diamond Jubilee Series) 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.

OFFICE CAREERS (OFC) 160 (3)
OFFICE MACHINES (3 LEC.)

This course focuses on the development of skills in using office machines. Adding machines, printing calculators, electronic display calculators, and electronic printing calculators are included. Emphasis is on developing the touch system for both speed and accuracy.

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.)

(Formerly Business 164) Prerequisite: 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 of shorthand outlines, speed building dictation, and producing mailable copy. Special attention is given to English fundamentals, such as grammar and punctuation.

OFFICE CAREERS (OFC) 172 (3)
BEGINNING TYPING (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.

OFFICE CAREERS (OFC) 174 (2)
INTERMEDIATE TYPING (1 LEC., 2 LAB.)

Prerequisite: 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 is also 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) 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.

OFFICE CAREERS (OFC) 273 (2)
ADVANCED TYPING (1 LEC., 2 LAB.)

Prerequisite: Office Careers 174 or two years of typing in high school. 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.

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 excercises, 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-jouranlism 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, architectual 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.

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)
SOFTBALL AND SOCCER (3 LAB.)

Softball and soccer are taught and played. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 113 (1)
HANDBALL AND RACQUETBALL (3 LAB.)

Handball and racquetball are taught and played. Emphasis is on the development of skills. A uniform is required. 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.)

Beginning archery is taught and played. Equipment is furnished. Laboratory fee.

PHYSICAL EDUCATION (PEH) 118 (1)
BEGINNING GOLF (3 LAB.)

Beginning golf is taught and played. 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 (2 LAB.)

Beginning bowling is taught and played. Equipment is furnished. 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) 124 (1)
SOCIAL DANCE (3 LAB.)

This course is for students who have limited experience in dance. Ballroom and social dancing are offered. Included are fundamental steps and rhythms of the fox-trot, waltz, tango, and recent dances. "Country" dancing includes the reel, square dance, and other dances. 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 a 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. Laboratory fee.

PHYSICAL EDUCATION (PEH) 127 (1)
BASKETBALL AND VOLLEYBALL (3 LAB.)

The techniques, rules, and strategy of basketball and volleyball are covered. Emphasis is on playing the games. A uniform is required. 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.

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) 210 (3)
SPORTS APPRECIATION FOR THE SPECTATOR (3 LEC.)

This course is for students who desire a broader knowledge of major and minor sports. The rules, terminology, and philosophies of many sports are studied. Special emphasis is on football and basketball.

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. 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) 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 aperature. 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 predental, biology, pre-medical, prepharmacy, 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 126 or 222. 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.)

Prerequisite: Physics 201 and credit or concurrent enrollment in Mathematics 223 or 227. 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)
SEX ROLES IN AMERICAN SOCIETY (3 LEC.)

Students may register for either Psychology 103 or Sociology 103 but receive credit for only one of the two. Human sexuality is studied. The physiological, psychological, and sociological aspects are included.

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)
SEX ROLES IN AMERICAN SOCIETY (3 LEC.)

Students may register for either Sociology 103 or Psychology 103 but may receive credit for only one. Human sexuality is presented. Topics include physiological, psychological, and sociological aspects.

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)
COMTEMPORARY 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 developent 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) 120 (3)
OXYACETYLENE WELDING (1 LEC., 5 LAB.)

This course meets general industrial requirements and focuses on setting up and using equipment for welding and cutting sheet and thin plate and small diameter pipe. All positions are included. Braze welding carbon steels and coat-irons are also included. This course is equivalent to Welding 140, 141, and 142. Laboratory fee.

WELDING (WE) 121 (4)
INTRODUCTION TO SHIELDED METAL-ARC PLATE WELDING (1 LEC., 7 LAB.)

Welding for general maintenance and production is the emphasis of this course. The use of manual alternating and direct current shielded metal-arc welding is included. Welding on ferrous metal in flat position and performing groove and fillet welds is covered. This course is equivalent to Welding 143, 144, and 145. Laboratory fee.

WELDING (WE) 122 (3)
SEMIAUTOMATIC WELDING I (1 LEC., 5 LAB.)

The semiautomatic and micro-wire arc welding process in the flat position is presented. This course is designed to enable students to meet general industrial requirements. This course is equivalent to Welding 147 and 148. Laboratory fee.

WELDING (WE) 123 (4)
COMBINATION ARC WELDING I (1 LEC., 7 LAB.)

Prerequisites: Welding 141, 142, and 145 or the equivalent. This course includes basic and advanced manipulative skills. it is designed to enable students to qualify for weld quality testing in accordance with the standards established by the American Welding Society for electric arc welding. This course is equivalent to Welding 149 and 241. Laboratory fee.

WELDING (WE) 124 (4)
COMBINATION PIPE WELDING I (1 LEC., 7 LAB.)

Prerequisites: Welding 145 and 149 or the equivalent. Welding techniques for the basic manual shielded metal-arc pipe are stressed. The course is designed to enable students to qualify on the various qualifications tests, as required by industry, in all positions with the semiautomatic micro-wire and flux cored arc welding process. This

course is equivalent to Welding 240 and 243. Laboratory fee.

WELDING (WE) 125 (4)
COMBINATION GAS SHIELDED ARC WELDING (1 LEC., 7 LAB.)

Prerequisites: Welding 147, 148, 149 and 243 or the equivalent. This course is designed to enable students to qualify on the various qualification tests in accordance with industrial requirements. This course also enables the student to weld pipe in the horizontal and vertical fixed positions with sufficient skill to pass the API and ASME qualification test using the micro-wire arc welding process. This course is equivalent to Welding 242 and 244. Laboratory fee.

WELDING (WE) 130 (3)
PATTERN LAYOUT (2 LEC., 3 LAB.)

Prerequisite: Blueprint Reading 177 or the equivalent or the consent of the instructor. The preparation and development of patterns are covered. The use of templets for general fabrication of sheet metal and structural materials is also covered. Laboratory fee.

WELDING (WE) 140 (1)
OXYACETYLENE WELDING I (1 LEC., 7 LAB.)

This course focuses on setting up and using equipment for flat position welding and cutting. On completion, students should be able to meet general industrial requirements for using oxyacetylene equipment in the flat position. Laboratory fee.

WELDING (WE) 141 (1)
OXYACETYLENE WELDING II (1 LEC., 7 LAB.)

This course covers the use of oxyacetylene equipment for welding sheet, thin plate, and small diameter pipe in all positions. It is designed to enable students to meet general industrial requirements. Laboratory fee.

WELDING (WE) 142 (1)
OXYACETYLENE BRAZE WELDING (1 LEC., 7 LAB.)

This is a basic manipulative skills training course designed to enable a student to meet general industrial requirements while using oxyacetylene equipment for braze welding carbon steels and coat-irons. Laboratory fee.

WELDING (WE) 143 (1)
SHIELDED METAL-ARC WELDING I (1 LEC., 7 LAB.)

This is a basic manipulative skills training course designed to develop general maintenance and production welding abilities for using manual alternating current shielded metal-arc (stick) welding equipment on ferrous metal in the flat positon. Laboratory fee.

WELDING (WE) 144 (1)
SHIELDED METAL-ARC WELDING II (1 LEC., 7 LAB.)

This is a basic manipulative skills training course designed to develop general maintenance and production welding abilities for using manual direct current shielded metal-arc (stick) welding equipment on ferrous metal in the flat position. Laboratory fee.

WELDING (WE) 145 (2)
PLATE WELDING I (1 LEC., 7 LAB.)

Prerequisite: Welding 143 and Welding 144, or equivalent. This is a basic manipulative skills training course designed to develop general maintenance and production welding abilities while using the manual shielded metal-arc (stick) process for performing groove and fillet welds with ferrous metals in all positions. Laboratory fee.

WELDING (WE) 146 (1)
PLASMA — ARC WELDING I (1 LEC., 7 LAB.)

Prerequisite: Welding 140, 141, and 145; or equivalent. This is a basic manipulative skills training course designed to enable the student to set up the equipment for flat position plasma-arc welding on stainless steel and aluminum. Laboratory fee.

WELDING (WE) 147 (2)
MICRO-WIRE WELDING I (1 LEC., 7 LAB.)

This is a basic manipulative skills training course designed to enable the student to meet general industrial requirements while using the micro-wire-arc (MIG) welding process in the flat position for sheet metal and thin gage plate. This course is open to both the beginning student and experienced welder. Laboratory fee.

WELDING (WE) 148 (1)
SEMIAUTOMATIC ARC WELDING I (1 LEC., 7 LAB.)

This is a basic manipulative skills training course designed to enable the student to meet general industrial requirement while using the semiautomatic arc welding process (large wire CO2 and flux core) for joining heavier plates in the flat position. This course is open to both the beginning student and experienced welders. Laboratory fee.

WELDING (WE) 149 (2)
GAS TUNGSTEN ARC WELDING (TIG) I (1 LEC., 7 LAB.)

Prerequisite: Welding 141 and 142; or equivalent. This is a basic manipulative skills training course designed to enable a student to meet general industrial requirements while using the gas tungsten-arc welding process for joining thin gauge material. Laboratory fee.

WELDING (WE) 150 (3)
BASIC WELDING METALLURGY (3 LEC.)

This is a theory type course designed to assist those students in welding or who are employed 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.

WELDING (WE) 240 (2)
PIPE WELDING I— (SHIELDED METAL-ARC) (1 LEC., 7 LAB.)

Prerequisite: Welding 145 or equivalent. This is a manipulative skills training course designed to introduce the student to the basic manual shielded metal-arc pipe welding techniques, material preparation and set up procedures in accordance with section IX of the ASME boiler and pressure vessel codes. Laboratory fee.

WELDING (WE) 241 (2)
PLATE WELDING II (1 LEC., 7 LAB.)

Prerequisite; Welding 145 or equivalent.This is an advanced manipulative skills level course designed to enable the student to qualify for weld quality testing in accordance with standards established by the American Welding Society for electric arc welding. Laboratory fee.

WELDING (WE) 242 (2)
GAS TUNGSTEN — ARC (1 LEC., 7 LAB.)

Prerequisite: Welding 149 or equivalent. This is an advanced manipulative skills level training course designed to enable the student to qualify on the various qualification tests in accordance with industrial requirements. Laboratory fee.

WELDING (WE) 243 (2)
SEMIAUTOMATIC ARC WELDING II (1 LEC., 7 LAB.)

Prerequisite: Welding 149 or equivalent. This is an advanced manipulative skills level training course designed to enable the student to qualify on the various qualification tests, as required by industry, in all positions with the semiautomatic micro-wire and flux cored arc welding process. Laboratory fee.

WELDING (WE) 244 (2)
MICRO-WIRE WELDING II (1 LEC., 7 LAB.)

Prerequisite: Welding 147, 148, and 243; or equivalent. This is an advanced skills level training course designed to enable the student to weld pipe in the horizontal and vertical fixed positions with sufficient skill to pass the API and ASME qualification test using the

micro-wire arc welding process. Laboratory fee.

WELDING (WE) 245 (1)
PLASMA-ARC WELDING II (1 LEC., 7 LAB.)

Prerequisite: Welding 146 or equivalent. This is an advanced skills level training course designed to enable the student to pass applicable qualification codes with the plasma arc welding process while joining carbon steel, stainless steel, and aluminum in all positions. Laboratory fee.

WELDING (WE) 246 (2)
PIPE WELDING II (1 LEC., 7 LAB.)

Prerequisite: Welding 143, 144, 145, and 240 or equivalent. This is an advanced skills level training course designed to enable the student to pass code qualification tests for carbon steel pipe welding in accordance with section IX of the ASME Boiler and Pressure Vessel Codes, or on request, Standard E1104 from the American Petroleum Institute. Laboratory fee.

WELDING (WE) 247 (1)
MANUAL SUBMERGED ARC WELDING (1 LEC., 7 LAB.)

Prerequisite: Welding 147 and 149; or equivalent. This is a manipulative skills level training course designed to familiarize the student with the variables concerning industrial applications of the submerged-arc welding process. On completion of this course the student will have a practical level of technical knowledge and ability for meeting general production welding requirements. Laboratory fee.

WELDING (WE) 248 (2)
SPECIALIZED WELDING APPLICATION I (1 LEC., 7 LAB.)

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, or allow him to meet job classification 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. Laboratory fee. This course may be repeated for credit.

WELDING (WE) 249 (2)
SPECIFIC CODE COMPETENCY PREPARATION (1 LEC., 7 LAB.)

This is an advanced skills level training course designed for welding operators wishing to qualify under specific welding codes or specifications. The training during this course will be conducted under instructional supervision in order to enable the operator to correct any faulty techniques he may have developed. Any specific code/codes involved must be specified when applying for admission to such training. This course is open only to experienced welding operators or students in advance standing. Laboratory fee. This course may be repeated for credit.

WELDING (WE) 250 (2)
SPECIALIZED WELDING APPLICATION II (1 LEC., 7 LAB.)

Prerequisite: Welding 248. A continuation of Welding 248-Specialized Welding Application I. Laboratory fee. This course may be repeated for credit.

WELDING (WE) 251 (3)
APPLIED WELDING METALLURGY (3 LEC.)

Prerequisite: Welding 150, 6 credit hours, welding lab courses. A theory course to continue, in more depth, than material covered in Welding 150. Designed to assist the student to improve communication skills with welding engineers and metallurgists. Includes a study of welding processes and their relationship to and effect upon metals and why they can/cannot be used for certain applications: the theory of heat-treating and its many uses: the value of preheat, inter pass temperature, and post heat in welding procedures. Designed to increase 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.

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
Air Traffic Control	MVC
Allied Health Technology	ECC
Histotechnology	ECC
Nuclear Medicine	ECC
Radiation Therapy	ECC
Animal Medical Technology	CVC
Apparel Design	ECC
Audio-Video Technician	MVC
Aviation Technology	MVC
Air Cargo	MVC
Aircraft Dispatcher	MVC
Airline Marketing	MVC
Career Pilot	MVC
Fixed Base Operations	MVC
Avionics	MVC
Automotive Parts	BHC
Automotive Machinist	BHC
Building Trades	
Carpentry	NLC
Electrical	NLC
Chemical Quality Control	
Paint and Coatings Control Technician	MVC
Water Quality Control Tech.	MVC
Commercial Music	CVC
Construction Management	RLC
Diesel Mechanics	NLC
Distribution Technology	NLC
Engineering Technology	RLC
Electro Mechanical	RLC
Fluid Power	RLC
Quality Control	RLC
Food Service Operations	ECC
Graphic Communications	EFC
Horology	MVC
Hotel/Motel Operations	ECC
Human Services	EFC
Interior Design	ECC
Legal Assistant	ECC
Motorcycle Mechanics	ECC
Optical Technology	NLC
Outboard Marine Engine Mechanics	CVC
Pattern Design	ECC
Purchasing Management	EFC, NLC
Retail Distribution Mktg.	
Commercial Design and Advertising	CVC
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
Civil/Construction Technology	NE
Dental Hygiene	NE
Emergency Medical Technology	NE
Food Store Marketing	NE
Industrial Supervision	S
Labor Studies	NE
Long Term Health Care Administration	NE
Mechanical Technology	S
Cast Metals Technology	S
Nondestructive Evaluation	S
Power Transmission	S
Media Technology	NE
Medical Records Technology	NE
Physical Therapist Assistant	NE
Property Tax Appraisal	NE

*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

In addition to the regular registration periods, registration for courses offered through Flexible Entry is held the first Monday, Tuesday and Wednesday of most months during the academic year. Registration is in the Registrar's Office and requires the instructor's approval. The following Technical/Occupational Programs offer sections included in this registration arrangement.

- Avionics Technology
- Aviation Technology
- Drafting & Design Technology
- Educational Paraprofessional
- Horology
- Machine Shop
- Office Careers
- Welding Technology
- All Cooperative Work Experience Courses

Students should check with the Registrar's Office each month to determine the sections which will be offered.

COOPERATIVE WORK EXPERIENCE

Students may enrich their education in certain Technical/Occupational Programs by enrolling in Cooperative Work Experience courses. These courses are designed to assist students in coordinating classroom study with related on-the-job experience.

Requirements:

1. Students must have completed at least six semester hours in their occupational major or secure instructor approval to be eligible for Cooperative Work Experience.
2. Students must be concurrently enrolled in a course related to their major subject area.
3. To enroll in a Cooperative Work Experience course, a student must have the approval of his instructor/coordinator.

Course credit will be awarded at the rate of one credit hour for each 80 hours of approved work experience accomplished during the semester. This is approximately five (5) hours a week during a sixteen (16) week semester. The work will be listed in the curriculum pattern for that program. Technical/Occupational Programs which include Cooperative Work Experience are:

- Accounting Associate
- Aviation Technology
- Avionics Technology
- Drafting & Design Technology
- Educational Paraprofessional
- General Office Occupations
- Machine Shop
- Professional Secretary
- Welding Technology

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

Occupational Education Programs	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Accounting Associate & Technician	x	x	x	x	x	x	x
Advertising Art	x						
Air Conditioning & Refrigeration		x	x			x	
Commercial & Residential		x				x	
Animal Medical Technology		x					
Apparel Design				x			
Architectural Technology				x			
Architectural Drafting				x			
Auto Body Technology	x		x				
Automotive Apprenticeship		x					
Automotive Machinist	x						
Automotive Parts	x						
Automotive Technology	x	x	x				
Aviation Maintenance Technology					x		
Airframe and Powerplant					x		
Aviation Technology					x		
Air Cargo Transport					x		
Air Traffic Control					x		
Aircraft Dispatcher					x		
Airline Marketing					x		
Career Pilot					x		
Fixed Base Operations/Airport Mgmt.					x		
Avionics Technology					x		
Banking & Finance							x
Banking Option							x
Credit and Financial Management							x
Credit Union Option							x
Savings and Loan Option							x
Building Trades						x	
Carpentry and Electricity						x	
Child Development Administrative	x						
Child Development Assistant & Associate	x		x				
Child Development Infant-Toddler	x						
Commercial Music		x					
Arranger/Composer/Copyist		x					
Music Retailing		x					
Performing Musician		x					
Recording Technology		x					
Construction Management and Technology							x
Data Processing				x			
Data Processing Operator				x			
Data Processing Programmer				x			
Information Systems				x			
Key Entry Data Control				x			
Small Computer Systems Information Specialist				x			
Diesel Mechanics						x	
Distribution Technology						x	
Drafting and Design Technology			x	x	x		
Electronic Design Option			x				
Educational Paraprofessional				x	x		x
Electrical Apprenticeship						x	
Electronics Technology					x		
Digital Electronics Technology			x				
Engineering Technology							x
Electrical Power, Fluid Power,							x
Electrical Mechanical, and Quality Control							x
Manufacturing Engineering Technology							x
Fire Protection				x			
Food Service				x			
Dietetic Assistant and Technician				x			
Food Service Operations				x			
School Food Service				x			

Occupational Education Programs	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Graphic Arts			x				
Graphic Communications			x				
Horology					x		
Hotel/Motel Operations				x			
Interior Design				x			
Legal Assistant				x			
Machine Parts Inspection					x		
Machine Shop					x		
Major Appliance Repair		x					
Medical							
Allied Health Technology				x			
Histotechnology				x			
Nuclear Medicine				x			
Radiation Therapy				x			
Associate Degree Nursing				x			
Dental Assistant Technology				x			
Medical Assistant Technology				x			
Medical Lab Technician				x			
Medical Transcriptionist				x			
Radiography Technology				x			
Respiratory Therapy Technician				x			
Respiratory Therapy Technology				x			
Surgical Technology				x			
Vocational Nursing				x			
Management Careers	x	x	x	x	x	x	x
Administrative Management Option	x	x	x	x	x	x	x
Mid-Management Option	x	x	x	x	x	x	x
Purchasing Management			x			x	
Sales, Marketing and Retail Management Option	x	x					
Small Business Management Option		x		x	x	x	x
Motorcycle Mechanics		x					
Office Careers	x	x	x	x	x	x	x
Insurance Office Careers							x
Office Skills and Systems			x		x		x
Optical Technology						x	
Ornamental Horticulture Technology							x
Florist and Greenhouse Florist							x
Landscape Nursery and Gardener							x
Outboard Marine Engine Mechanics		x					
Pattern Design				x			
Precision Optics Technology						x	
Police Science Technology				x			
Postal Service Administration					x		
Real Estate						x	x
Retail Distribution and Marketing	x	x					
Commercial Design and Advertising		x					
Fashion Merchandising	x	x					
Secretarial Careers	x	x	x	x	x	x	x
Administrative Secretary			x				
Educational Secretary							x
General Secretary	x	x	x	x	x	x	x
Legal Secretary		x				x	
Professional Secretary	x	x	x	x	x	x	x
Small Engine Mechanics		x					
Social Work Associate			x				
Solar Energy Technology						x	
Training Paraprofessionals for Deaf			x				
Transportation Technology			x				
Welding Technology			x		x		

BHC — Brookhaven College
CVC — Cedar Valley College
EFC — Eastfield College
ECC — El Centro College
MVC — Mountain View College
NLC — North Lake College
RLC — Richland College

HOME/HOST COURSES: A limited number of courses pertaining to a program which is available at one college (home) might be offered at another college (host). This arrangement would involve only the introductory courses in a program and would necessitate completion of the program at the "Home" college.

ACCOUNTING ASSOCIATE

(Associate Degree of Applied Arts and Sciences)

This two-year program is designed for persons interested in pursuing careers as junior accountants in business, industry, and government. Emphasis will be placed on internal accounting procedures and generally accepted accounting principles and tax accounting.

Students must complete all of the following:

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
ACC 201	Principles of Accounting I	3		48	3
ACC 202	Principles of Accounting II	3		48	3
ACC 203	Intermediate Accounting	3		48	3
ACC 204	Managerial Accounting	3		48	3
BUS 105	Introduction of Management	3		48	3
MGT 136	Principles of Management	3		48	3
OFC 160	Office Machines	3		48	3
OFC 172	Beginning Typing	2	3	80	3
OFC 231	Business Communications	3		48	3
BUS 234	Business Law	3		48	3
ACC 238	Cost Accounting	3		48	3
					33
REQUIRED SUPPORT COURSES					
COM 131	Applied Composition and Speech	3		48	3
or					
ENG 101	Composition & Expository Reading				
COM 132	Applied Composition and Speech	3		48	3
or					
ENG 102	Composition and Literature				
CS 175	Introduction to Computing Science	3		48	3
ECO 201	Principles of Economics I	3		48	3
ECO 202	Principles of Economics II	3		48	3
GOV 201	American Government	3		48	3
MTH 130	Business Mathematics	3		48	3
or					
MTH 111	Mathematics for Business				
					21

Plus any additional 6 credit hours of recommended electives listed below.

RECOMMENDED ELECTIVES:					
BUS 143	Personal Finance	3		48	3
ACC 205	Business Finance	3		48	3
MGT 206	Principles of Marketing	3		48	3
ACC 239	Income Tax Accounting	3		48	3
PSY 105	Introduction to Psychology	3		48	3
PSY 131	Human Relations	3		48	3
ACC 803	Cooperative Work Experience	1	15	256	3
ACC 804	Cooperative Work Experience	1	20	336	4

Those students who plan to continue their education in Accounting Associate in pursuit of a Baccalaureate Degree should consult a counselor on entering this program.

ACCOUNTING TECHNICIAN

(One-Year Certificate)

The objective of this program is to provide the student with a working knowledge of bookkeeping procedures currently in use in business; to introduce the student to accounting principles supporting bookkeeping procedures; and to give the student practical bookkeeping experience by the use of problem solving.

Students must complete all of the following:

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
BUS 105	Introduction to Business	3		48	3
ACC 131	Bookkeeping I	3		48	3
ACC 132	Bookkeeping II	3		48	3
OFC 160	Office Machines	3		48	3
OFC 172	Beginning Typing	2	3	80	3
or					
OFC 174	Intermediate Typing	(1)	(2)	(48)	(2)
					15
REQUIRED SUPPORT COURSES					
COM 131	Applied Composition and Speech	3		48	3
COM 132	Applied Composition and Speech	3		48	3
CS 175	Introduction to Computing Science	3		48	3
MTH 130	Business Mathematics	3		48	3
					12

Plus any additional 3 credit hours of recommended electives listed below.

RECOMMENDED ELECTIVES:					
OFC 162	Office Procedures	3		48	3
OFC 231	Business Communications	3		48	3
BUS 234	Business Law	3		48	3
PSY 131	Human Relations	3		48	3

AIR TRAFFIC CONTROL

(Associate of Applied Arts and Sciences)

REQUIRED CORE COURSES		LEC.	LAB	FLT. HRS.	CONT. HRS.	CR HRS
AVT 121	Ground School Private	3			48	3
AVT 210	FAA Regulations, Airspace and Air Traffic Control	3	4 +		52	3
AVT 226	Meteorology	3			48	3
AVT 135	Flight Basic		9	25	34	2
AVT 137	Flight Private Pilot		4	20	24	1
AVT 221	Advanced Navigation	2	2		64	3
AVT 224	Ground School Instrument	3			48	3
AVT 270	Orientation to Air Traffic Control	5			80	5
AVT 272	Aircraft Types and Characteristics/ Air Traffic Control Communications	2			32	2
AVT 274	Air Traffic Control Computer Operations	3			48	3
AVT 704	Cooperative Work Experience	1	20		336	4
AVT 804	Cooperative Work Experience	1	20		336	4
AVT 814	Cooperative Work Experience	1	20		336	4
						40

+ 4 hours in the Synthetic Flight Trainer per semester

REQUIRED SUPPORT COURSES						
ENG 101	Composition and Expository Reading	3			48	3
ENG 102	Composition and Literature	3			48	3
SPE 105	Fundamentals of Public Speaking	3			48	3
MTH 195	Technical Mathematics	3			48	3
						12

Plus any additional 9 credit hours of recommended electives listed below:

RECOMMENDED ELECTIVES						
MGT 136	Principles of Management	3			48	3
MGT 242	Personnel Administration	3			48	3
AVT 212	Airport Management	3			48	3
AVT 223	Airline Management	3			48	3
PSY 131	Human Relations	3			48	3

AIRCRAFT DISPATCHER

(Associate in Applied Arts and Sciences)

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
AVT 110	Introduction to Aviation	3		48	3
AVT 121	Private Pilot Ground School	3		48	3
AVT 122	Aviation Law	3		48	3
AVT 128	*Aero Engines and Systems*	3		48	3
AVT 210	FAA Regulations, Airspace & Air Traffic Control Services	3	4 +	52	3
AVT 226	Meteorology	3		48	3
AVT 123	Ground School Commercial	3		48	3
AVT 221	Advanced Navigation	2	2	64	3
AVT 224	Ground School Instrument	3		48	3
AVT 261	Aircraft Dispatcher	3		48	3
AVT 262	Practical Dispatching	3	10‡	58	3
					33

+ 4 hours in the Synthetic Flight Trainer per semester
‡10 hours in the Synthetic Flight Trainer per semester

REQUIRED SUPPORT COURSES					
CS 175	Computing Science	3		48	3
ENG 101	*Composition & Expository Reading*	3		48	3
SPE 105	Fundamentals of Public Speaking	3		48	3
MTH 195	Technical Mathematics	3		48	3
PSY 131	Human Relations	3		96	3
AV 129	*Introduction to Aircraft Electronic Systems*	2	2	64	3
MGT 136	Principles of Management	3		48	3
					21

Plus any additional 4 credit hours of recommended electives listed below:

RECOMMENDED ELECTIVES					
PEH 115	Physical Fitness		3	48	1
or					
PEH 125	Conditioning Exercise		3	48	1
or					
PEH 131	*Weight Training and Conditioning*		3	48	1
BUS 105	Introduction to Business	3		48	3
MTH 196	Technical Mathematics	3		48	3
AVT 703	Cooperative Education	1	15	256	3
or					
AVT 704	Cooperative Education	1	20	336	4

AVIATION MAINTENANCE TECHNOLOGY

(Associate Degree of Applied Arts & Sciences)

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, 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.

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
APM 100	Aircraft Basic Science	86	64	150	5
APM 101	Applied Aircraft Science	78	72	150	5
APM 102	Basic Electricity	82	68	150	5
COM 131	Applied Composition and Speech				
or					
ENG 101	Composition & Expository Reading	3		48	3
					18
AIRFRAME OPTION					
APM 200	Airframe Structures	58	92	150	5
APM 201	Sheet Metal Structures	28	122	150	5
APM 202	Hydraulics and Landing Gear	52	98	150	5
APM 203	*Airframe Electrical Systems*	68	82	150	5
APM 204	Utility Systems	72	78	150	5
APM 205	Inspection and Review	72	78	150	5
PSY 131	Human Relations	3		48	3
					33
POWERPLANT OPTION					
APM 220	Reciprocating Engines	69	81	150	5
APM 221	Gas Turbine Powerplants	90	60	150	5
APM 222	Powerplant Electrical Systems	58	92	150	5
APM 223	Powerplant Accessory Systems	58	92	150	5
APM 224	Fuel Metering and Troubleshooting	62	88	150	5
APM 225	Powerplant Review and Inspection	72	78	150	5
SS 131	American Civilization				
or					
HST 101	History of the United States	3		48	3
					33

AVIATION TECHNOLOGY

(Associate Degree of Applied Arts and Sciences)

OPTIONS

- Career Pilot
- Air Cargo Transport
- Airline Marketing
- Fixed Base Operations/Airport Management
- Aircraft Dispatcher
- *Air Traffic Control*

(Aircraft Dispatcher, One-Year Certificate Program)

Aviation Technology is designed to allow students to take a core of basic courses and then choose the fields they wish to enter. The degree options are Career Pilot (including Flight Instructor Certificate, Multi-Engine Ratings, *Flight Engineer and* Air Transport Pilot Ground School), Air Cargo Transport, Airline Marketing, Fixed Base Operations/Airport Management, Aircraft Dispatcher and Air Traffic Control.

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 Regulations, and thus, are subject to change to conform to such regulations. Admission to this program is by application to the Chief Flight Instructor and should be approved prior to registration and payment of tuition and fees. The student should recognize that *simulator fees, flight fees and fees for pre-and post-flight briefing* are in addition to the regular tuition charge.

Air Cargo Transport, Airline Marketing and Fixed Base Operations/Airport Management programs are designed for students desiring entry into managerial roles in the aviation industry. After completing courses in the common course *curriculum students will* select an option for additional study.

The Aircraft Dispatcher Program contains both the One-Year Certificate and the Associate Degree of Applied Arts and Sciences. Entry into either program will be in accordance with F.A.A. regulations. Upon completion of the courses in the desired program students will be prepared to apply to take the F.A.A. written exam for Aircraft Dispatcher. Students interested in admission to the Air Traffic Control Degree Program must have completed 15 credit hours prior to enrollment into the Air Traffic Control specialized courses. It is recommended that the 15 credit hours be selected from AVT 121, AVT 135, AVT 137, AVT 210, AVT 226 and AVT 221 in order that the student can be better prepared to meet the following eligibility requirements established by the F.A.A.:

1. Be a U.S. citizen
2. Be in attendance at a participating college and must be a full-time student
3. Be enrolled in the Co-op program of the college
4. Be between the ages of 16 and 28
5. Meet overall scholastic average required by college (not lower than 2.0 GPA based on a 4.0 scale)
6. Not be a son or daughter of an F.A.A. employee
7. Have at least 15 semester hours of college credit toward a degree
8. Successfully complete a written Air Traffic entrance exam, interview, medical exam, suitability investigation and security investigation

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
AVT 110	Introduction to Aviation	3		48	3
AVT 121	Private Pilot Ground School	3		48	3
AVT 122	Aviation Law	3		48	3
AVT 210	FAA Regulations, Airspace & Air Traffic Control Services	3	4 +	52	3
AVT 212	Airport Management	3		48	3
**AVT 226	Meteorology	3		48	3
ENG 101	Composition & Expository Reading	3		48	3
SPE 105	Fundamentals of Public Speaking	3		48	3
MTH 101	College Algebra	3		48	3
or					
MTH 195	Technical Mathematics				
or					
MTH 130	Business Mathematics				
PSY 131	Human Relations	3		48	3
*AV 129	Introduction to Aircraft Electronic Systems	2	2	64	3
					33

*Not required for Air Cargo or Marketing Options
**Not required for Airline Marketing Option
+ 4 hours in the Synthetic Flight Trainer per semester

CAREER PILOT OPTION		LEC.	LAB	FLT. HRS.	CONT. HRS.	CR HRS
AVT 128	Aero Engines & Systems	3			48	3
AVT 123	Ground School Commercial	3			48	3
AVT 220	Aero Dynamics	3			48	3
AVT 221	Advanced Navigation	2	2		64	3
AVT 224	Ground School Instrument	3			48	3
AVT 135	Flight Basic		9	25	34	2
AVT 137	Flight Private Pilot		4	20	24	1
AVT 227	Flight Commercial I		8	30	38	2
AVT 228	Flight Commercial II		8	46	54	3
AVT 229	Flight Commercial III		4	46	50	3
AVT 230	Flight Commercial IV — Instrument		26	20	46	3
						29

ADDITIONAL OPTIONS FOR CAREER PILOT

FLIGHT INSTRUCTOR CERTIFICATE:						
AVT 250	Flight Instructor - Ground School	2			32	2
AVT 252	Instrument Flight Instructor Ground School	3			48	3
AVT 251	Flight Instructor - Airplane (Single or Multi-engine)		10	30	40	2
AVT 253	Flight Instructor - Airplane Instrument		10	10	20	1
MULTI-ENGINE RATING:						
AVT 254	Flight Advanced I		6	10	16	1

FLIGHT ENGINEER						
AVT 263	Flight Engineer-Ground School	3			48	3
AIR TRANSPORT PILOT:						
AVT 264	Air Transport Pilot Ground School	3			48	3

AIR CARGO TRANSPORT OPTION		LEC.	LAB	FLT. HRS.	CONT. HRS.	CR HRS
AVT 222	Transportation, Traffic & Air Cargo	3			48	3
AVT 223	Airline Management	3			48	3
AVT 225	Aviation Marketing	3			48	3
AVT 248	Air Transportation	3			48	3
BUS 105	Introduction to Business	3			48	3
ACC 201	Principles of Accounting I	3			48	3
ECO 201	Principles of Economics I	3			48	3
CS 175	Introduction to Computing Science	3			48	3
AVT 703	Cooperative Work Experience	1	15		256	3
						27

RECOMMENDED ELECTIVES:

MGT 136	Principles of Management	3			48	3
ACC 202	Principles of Accounting II	3			48	3
BUS 234	Business Law	3			48	3
ECO 202	Principles of Economics II	3			48	3

AIRLINE MARKETING OPTION						
AVT 222	Transportation, Traffic & Air Cargo	3			48	3
AVT 223	Airline Management	3			48	3
AVT 225	Aviation Marketing	3			48	3
AVT 248	Air Transportation	3			48	3
BUS 105	Introduction to Business	3			48	3
ACC 201	Principles of Accounting I	3			48	3
MGT 230	Salesmanship	3			48	3
or						
MGT 233	Advertising and Sales Promotion					
ECO 201	Principles of Economics I	3			48	3
AVT 703	Cooperative Work Experience	1	15		256	3
or	Elective					
						27

RECOMMENDED ELECTIVES:

ACC 202	Principles of Accounting II	3			48	3
MGT 206	Principles of Marketing	3			48	3
BUS 234	Business Law	3			48	3
ECO 202	Principles of Economics II	3			48	3

FIXED-BASE OPERATIONS/AIRPORT MANAGEMENT OPTION		LEC.	LAB	CONT. HRS.	CR. HRS.
AVT 222	Transportation, Traffic & Air Cargo	3		48	3
AVT 223	Airline Management	3		48	3
AVT 248	Air Transportation	3		48	3

BUS 105	Introduction to Business	3		48	3
ACC 201	Principles of Accounting I	3		48	3
ECO 201	Principles of Economics I	3		48	3
CS 175	Introduction to Computing Science	3		48	3
AVT 703	Cooperative Work Experience	1	15	256	3
or	Elective				
					24

RECOMMENDED ELECTIVES:

MGT 136	Principles of Management	3		48	3
ACC 202	Principles of Accounting II	3		48	3
BUS 234	Business Law	3		48	3
MGT 153	Small Business Management	3		48	3
ECO 202	Principles of Economics II	3		48	3

AIRCRAFT DISPATCHER (One-Year Certificate Program)		LEC.	LAB	CONT. HRS.	CR. HRS.
AVT 110	Introduction to Aviation	3		48	3
AVT 121	Private Pilot Ground School	3		48	3
AVT 122	Aviation Law	3		48	3
AVT 128	Aero Engines & Systems	3		48	3
AVT 210	FAA Regulations, Airspace and Air Traffic Control Services	3	4+	52	3
AVT 226	Meterology	3		48	3
AVT 123	Ground School Commercial	3		48	3
AVT 221	Advanced Navigation	2	2	64	3
AVT 224	Ground School Instrument	3		48	3
AVT 261	Aircraft Dispatcher	3		48	3
AVT 262	Practical Dispatching	3	10‡	58	3
					33

+ 4 hours in the Synthetic Flight Trainer per semester
‡ 10 hours in the Synthetic Flight Trainer per semester

RECOMMENDED ELECTIVE:

AVT 703	Cooperative Work Experience	1	15	256	3

AVIONICS TECHNOLOGY

(One-Year Certificate)

This one-year Certificate program is intended to provide the student with a basic electronics background and a level of knowledge and practical skills adequate to gain entry-level employment in the installation and maintenance of Aircraft Electronics Systems (Avionics). This program will concentrate on the technical knowledge offered in a lecture/supervised laboratory instructional mode.

REQUIRED CORE COURSES		LEC.	LAB	CONT HRS.	CR. HRS.
AV 129	Introduction to Aircraft Elec. Systems	2	2	64	3
AV 132	Materials, Tools and Installation Techniques and Practices	3	3	96	4
AV 235	Checkout, Troubleshooting and Related Test Apparatus	3	3	96	4
ET 135	D.C./A.C. Theory and Circuit Analysis	5	3	128	6
or					
ET 190	D.C. Circuits & Electrical Measurement				
and					
ET 191	A.C. Circuits				
ET 193	Active Devices	3	3	96	4

REQUIRED SUPPORT COURSES:

MTH 195	Technical Mathematics	3		48	3
PHY 118	Concepts in Physics	3	3	96	4
MGT 153	Small Business Management	3		48	3
COM 131	Applied Composition and Speech	3		48	3
					34

RECOMMENDED ELECTIVES:

AV 803-813		1	15	256	3
AV 804-814		1	20	336	4

DATA PROCESSING PROGRAMMER

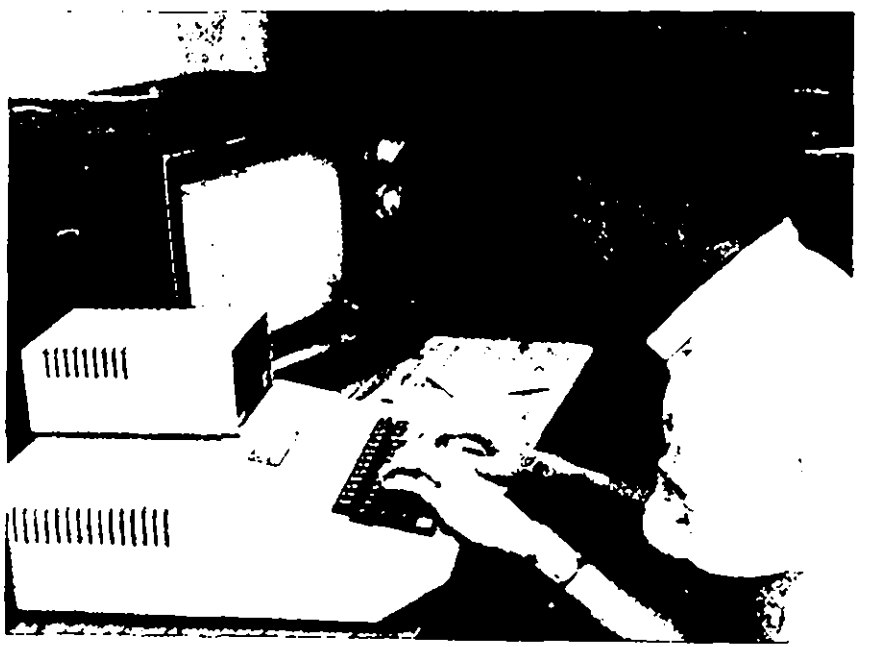
(Associate Degree in Applied Arts and Sciences)

This curriculum is intended for the preparation of students interested in systems work or other four-year degree programs. The curriculum includes many of the basic data processing courses as well as the basic requirements for four-year programs. There is a heavy emphasis on accounting. Students who plan to obtain baccalaureate degrees should determine what school they wish to transfer to and then seek the assistance of a counselor in planning their program to meet the requirements of the particular college to which they plan to transfer.

REQUIRED COURSES		LEC. HRS.	LAB. HRS.	CR. HRS.
FALL SEMESTER I				
CS 175	Introduction to Computer Science	3	0	3
DP 139	Technician	2	4	3
DP 137	Data Processing Math or			
MTH 130	Business Mathematics	3	0	3
COM 131	Applied Composition and Speech or			
ENG 101	Composition and Expository Reading	3	0	3
ACC 131	Bookkeeping I or			
ACC 201	Principles of Accounting I	3	0	3
SPRING SEMESTER I				
DP 133	Beginning Programming (COBOL)	3	4	4
DP 138	Data Processing Logic	3	0	3
BUS 105	Introduction to Business	3	0	3
ACC 202	Principles of Accounting II	3	0	3
COM 132	Applied Composition and Speech or			
ENG 102	Composition and Literature	3	0	3
FALL SEMESTER II				
DP 136	Intermediate Programming (COBOL)	3	4	4
DP 131	RPG Programming or			
CS 176	FORTRAN Programming	2	2	3
DP or CS elective (any 200 level DP or CS course)				3-4
DP 233	Operating Systems & Communications	3	4	4
ACC 203	Intermediate Accounting or			
ACC 238	Cost Accounting	3	0	3
SPRING SEMESTER II				
DP 231	Advanced Programming (ALC)	3	4	4
DP 232	Applied Systems	3	4	4
Approved elective (listed below)				3-4
ECO 201	Principles of Economics	3	0	3
				62-64

Approved Electives:

DP 129	Data Entry Concepts
MGT 136	Principles of Management
MGT 206	Principles of Marketing
BUS 234	Business Law
BUS 237	Organizational Behavior
ECO 202	Principles of Economics II
MTH 202	Introductory Statistics
CS 176	FORTRAN Programming
CS 250	Cont. Topics in CS
CS 251	Special Topics in CS & DP
DP 236	Advanced COBOL Techniques
CS 240	Telecommunications I
DP	(Cooperative Work Experience) 702, 712, 802, 812, 703, 713, 803, 813, 704, 714, 804, 814



DRAFTING & DESIGN TECHNOLOGY

(Associate Degree of Applied Arts and Sciences)

This program prepares the student for employment in a wide range of industries as a draftsman or engineering aide. Information in related fields is provided to enable the student to work effectively with the engineer and professional staff. This program is also adapted to the Flexible Entry mode of registration which allows students to enroll the first Monday of October and November in the fall semester and the first Monday of February and March in the spring semester.

Students must complete all of the following:

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
DFT 135	Reproduction Processes	1	3	64	2
DFT 183	Basic Drfating	2	6	128	4
DFT 184	Intermediate Drafting	2	4	96	3
DFT 230	Structural Drafting	2	4	96	3
DFT 231	Electronic Drafting	2	4	96	3
DFT 232	Technical Illustration	2	4	96	3
EGR 106	Descriptive Geometry	2	4	96	3
EGR 186	Manufacturing Processes	1	2	48	2
					23

REQUIRED SUPPORT COURSES					
COM 131	Applied Composition and Speech	3		48	3
COM 132	Applied Composition and Speech	3		48	3
MTH 195	Technical Mathematics	3		48	3
MTH 196	Technical Mathematics	3		48	3
PHY 131	Applied Physics	3	3	96	4
PSY 131	Human Relations	3		48	3
SS 131	American Civilization	3		48	3
SS 132	American Civilization	3		48	3
					25

Plus any additional 13 credit hours of recommended elective courses listed below.

RECOMMENDED ELECTIVES:

(These courses are offered on the basis of sufficient demand for them.)

DFT 136	Geological and Land Drafting	2	4	96	3
DFT 185	Architectural Drafting	2	6	128	4
DFT 233	Machine Design	2	6	128	4
DFT 234	Advanced Technical Illustration	2	6	128	4
DFT 235	Building Equipment	2	4	96	3
DFT 236	Piping and Pressure Vessel Design	2	4	96	3
DFT 813	Cooperative Work Experience	1	15	256	3
DFT 814	Cooperative Work Experience	1	20	336	4

Those students who plan to continue their education in Drafting in pursuit of a Baccalaureate Degree should consult a counselor on entering this program.

EDUCATIONAL PARAPROFESSIONAL

(Educational Assistant, One-Year Certificate Program)
(Educational Associate Degree of Applied Arts and Sciences, Two-Year Program)

This program is designed to prepare paraprofessionals to school personnel in a wide range of supportive duties common to educational processes. It is designed to enhance a student's understanding of the learning processes and stages of development. This program can also be adapted to Flexible Entry mode of registration which allows students to enroll the first Monday of October and November in the fall semester and the first Monday of February and March in the spring semester.

A student completeing the following courses may receive an Educational Assistant Certificate:

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
EP 131	Introduction to Educational Processes I	3		48	3
EP 129	Communications Skills for Educational Paraprofessionals	3		48	3
EP 134	Introduction to Media	2	2	64	3
and/or					
EP 135	Arts and Crafts for Educational Paraprofessionals				
EP 133	Introduction to Educational Processes II	3		48	3

Plus any additional 15 hours of support courses as approved from the total educational paraprofessional program to complete a total of 30 semester hours.

A student wishing to receive an Educational Associate Degree for the Educational Paraprofessional may continue in the program and receive the Associate of Applied Arts and Sciences Degree by completing the following courses.

The EP core courses listed above plus:

EP 247	Diversified Studies	3		48	3
EP 804	Cooperative Work Experience	1	20	336	4

Plus any additional 27 hours of support courses as approved from the total Educational Paraprofessional program for a total of 64 semester hours for an Educational Associate Degree.

Cooperative Work Experience					4
Communications (may be chosen from the following):					12
Developmental Studies Reading and/or Writing					
COM 131	Applied Composition and Speech	3		48	
COM 132	Applied Composition and Speech	3		48	
ENG 101	Composition and Expository Reading	3		48	
ENG 102	Composition and Literature	3		48	
ENG 201	British Literature	3		48	
ENG 202	British Literature	3		48	
HD 105	Basic Processes of Interpersonal Relationships	3		48	3
DM 090 or 091 or Math Elective		3		48	3
OFC 172	Beginning Typing or Proficiency exam	2	3	80	3

OFC 160	Office Machines	3		48	3
OFC 174	Intermediate Typing	1	2	48	2
PSY 105	Introduction to Psychology	3		48	3
PSY 201	Developmental Psychology	3		48	3
SOC 101	Introduction to Sociology	3		48	3
SOC 102	Social Problems	3		48	3
PEH 101	Fundamentals of Health	3		48	3
PEH 144	Introduction to Physical Education	3		48	3
PEH 257	Standard and Advanced First Aid	3		48	3
Art or Music (or courses occupationally appropriate and approved by the EP Instructor)					6

Those students who plan to continue their education in pursuit of a Baccalaureate Degree should consult a counselor on entering this program.

ELECTRONICS TECHNOLOGY

(Associate Degree of Applied Arts and Sciences)

This two-year program will prepare the student for work as an electronics technician by familiarizing him with most electronic testing equipment, training him in technical communications, and providing him with electronic theory and skills.

Students must complete all of the following:

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
ET 190	D.C. Circuits & Electrical Measurements	3	3	96	4
ET 191	A.C. Circuits	3	3	96	4
ET 193	Active Devices	3	3	96	4
ET 194	Instrumentation	2	3	80	3
ET 231	Special Circuits	3	3	96	4
ET 232	Logic-Switch Circuits	3	3	96	4
ET 239	Industrial and Microwave Electronics Technology	3		48	3
ET 234	Electronic Circuits and Systems		6	96	3
ET 240	Electronics Theory & Application of Digital Computers	3	3	96	4
ET 237	Modular Memories and Microprocessors	3	3	96	4
					37

REQUIRED SUPPORT COURSES	
Communications or English	6
Technical Mathematics or College Level Mathematics	6
Social Science or History or Government	6
Applied Physics or College Level Physics	4
Human Relations or Psychology or Human Development	3
DFT 182 or DFT 183 or DFT 231	2
	27

Plus any additional 3 credit hours of the recommended electives listed below.

RECOMMENDED ELECTIVES:					
ET 238	Linear Integrated Circuits	3	3	96	4
ET 803	Cooperative Work Experience	1	15	256	3
ET 813	Cooperative Work Experience	1	15	256	3

Those students who plan to continue their education in pursuit of a Baccalaureate Degree should consult a counselor on entering this program.

HOROLOGY

(Certificate Programs)

These intensive programs have the objectives of developing the student's manual dexterity, judgement, 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.

CLOCK REPAIR

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
HOR 139	Antique Clock Theory and Repair	2	23	275	8
HOR 140	Modern Clock Theory and Repair	2	23	275	8
					16

REQUIRED SUPPORT COURSES					
COM 131	Applied Composition and Speech	3		48	3
MGT 153	Small Business Management	3		48	3
					6

WATCH REPAIR

REQUIRED CORE COURSES					
HOR 141	Watch Cleaning and Assembly	2	23	275	8
HOR 142	Watch Part Replacement	2	23	275	8
HOR 143	Advanced Watchmaking I	2	23	275	8
HOR 144	Advanced Watchmaking II	2	23	275	8
					32

REQUIRED SUPPORT COURSES					
COM 131	Applied Composition and Speech	3		48	3
MGT 153	Small Business Management	3		48	3
					6

Completion of COM 131 and MGT 153 will fulfill the requirements for either or both certificate programs.

MACHINE PARTS INSPECTION

(Associate Degree of Applied Arts and Sciences)

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.

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
MPI 122	Industrial Quality Control & Procedures	3		48	3
MPI 124	Basic Inspection Fundamentals	1	8	144	5
MPI 135	Intermediate Inspection Concepts	1	8	144	5
MPI 138	Geometric Tolerancing and True Positioning	2	2	64	3
MPI 220	Introduction to Materials and Processors	3		48	3
MPI 223	Advanced Inspection Concepts	1	8	144	5
MPI 227	Non-Destructive Testing	3		48	3
MPI 230	Introduction to Statistical Quality Control Techniques	3		48	3
MPI 237	Gage Control Standardization and Precision Measurement	2	4	96	3
MPI 803	Cooperative Work Experience	1	15	256	3
MPI 813	Cooperative Work Experience	1	15	256	3
					39
REQUIRED SUPPORT COURSES					
QCT 122	Dimensional Measurements	2	2	64	3
COM 131	Applied Composition and Speech	3		48	3
PSY 131	Human Relations	3		48	3
PHY 131	Applied Physics	3	3	96	4
BPR 177	Blueprint Reading	1	3	64	2
BPR 178	Blueprint Reading	1	3	64	2
MTH 195	Technical Mathematics	3		48	3
MTH 196	Technical Mathematics	3		48	3
EGR 186	Manufacturing Processes	1	2	64	2
					25

MACHINE SHOP

(Associate Degree of Applied Arts and Sciences)

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.

Students must complete all of the following:

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
MS 133	Basic Lathe	1	8	144	5
MS 134	Basic Milling Machine	1	8	144	5
MS 135	Intermediate Lathe	1	8	144	5
MS 136	Intermediate Milling Machine	1	8	144	5
MS 233	Advanced Lathe	1	8	144	5
MS 234	Advanced Milling Machine	1	8	144	5
MS 235	Applied Lathe	1	8	144	5
MS 236	Applied Milling Machine	1	8	144	5
					40
REQUIRED SUPPORT COURSES					
BPR 177	Blueprint Reading	1	3	64	2
BPR 178	Blueprint Reading	1	3	64	2
COM 131	Applied Composition and Speech	3		48	3
MTH 195	Technical Mathematics	3		48	3
MTH 196	Technical Mathematics	3		48	3
PHY 131	Applied Physics	3	3	96	4
PSY 131	Human Relations	3		48	3
QCT 122	Dimensional Measurement	2	2	64	3
					23

Plus any additional 6 credit hours of recommended electives listed below.

RECOMMENDED ELECTIVES:					
EGR 186	Manufacturing Processes	1	2	48	2
PHY 132	Applied Physics	3	3	96	4
MS 702	Cooperative Work Experience	1	10	176	2
MS 704	Cooperative Work Experience	1	20	336	4

Those students who plan to continue their education in Machine Shop in pursuit of a Baccalaureate Degree should consult a counselor on entering this program.

MANAGEMENT CAREERS

(Associate Degree of Applied Arts and Sciences)

This business management program offers several options of study designed to develop the fundamental skills, knowledge, attitudes, and experiences which enable men and women to function in decision-making positions as supervisors or junior executives. Students must complete all required core and support courses as well as those courses outlined for the option of their choice. Successful completion of this program leads to the Associate Degree in Applied Arts and Sciences.

CORE COURSES (Required for all options)		LEC. HRS.	LAB HRS.	CONT. HRS.	CR. HRS.
BUS 105	Introduction to Business	3		48	3
ACC 201	Principles of Accounting I	3		48	3
or					
ACC 131	Bookkeeping I	(3)			(3)
and					
ACC 132	Bookkeeping II	(3)			(3)
ECO 201	Principles of Economics I	3		48	3
ECO 202	Principles of Economics II	3		48	3
CS 175	Introduction to Computing Science	3		48	3
MGT 136	Principles of Management	3		48	3
PSY 131	Human Relations	3		48	3
HUM 101	Introduction to the Humanities	3		48	3
					24-27
SUPPORT COURSES (Required for all options)					
COM 131	Applied Composition and Speech	3		48	3
COM 132	Applied Composition and Speech	3		48	3
	Social Science elective or Humanities elective	3		48	3
MTH 111	Math. for Business & Economics I				
or					
MTH 112	Math. for Business & Economics II				
or					
MTH 130	Business Math	3		48	3
					12

ADMINISTRATIVE MANAGEMENT OPTION		LEC. HRS.	LAB HRS.	CONT. HRS.	CR. HRS.
ACC 202	Principles of Accounting II	3		48	3
MGT 206	Principles of Marketing	3		48	3
BUS 234	Business Law	3		48	3
MGT 242	Personnel Administration	3		48	3
BUS 237	Organizational Behavior	3		48	3
OFC 231	Business Communications	3		48	3
					18

Plus any additional 9 credit hours of recommended electives listed below:

MGT 171	Introduction to Supervision	3		48	3
MGT 230	Salesmanship	3		48	3
MGT 233	Advertising and Sales Promotion	3		48	3
MGT 212	Special Problems in Business	1		16	1
OFC 160	Office Machines	3		48	3
OFC 172	Beginning Typing	2	3	80	3

MID-MANAGEMENT OPTION		LEC. HRS.	LAB HRS.	CONT. HRS.	CR. HRS.
MGT 150	Mangement Training		20	320	4
MGT 154	Management Seminar: Role of Supervision	2		32	2
MGT 151	Management Training		20	320	4
MGT 155	Management Seminar: Personnel Management	2		32	2
MGT 250	Management Training		20	320	4
MGT 254	Management Seminar: Organizational Development	2		32	2
MGT 251	Management Training		20	320	4
MGT 255	Management Seminar: Business Strategy, the Decision Process & Problem Solving	2		32	2
					24

Plus any additional 3 credit hours of recommended electives listed below.

RECOMMENDED ELECTIVES					
MGT 171	Introduction to Supervision	3		48	3
MGT 242	Personnel Administration	3		48	3
MGT 137	Principles of Retailing	3		48	3
MGT 230	Salesmanship	3		48	3
MGT 233	Advertising and Sales Promotion	3		48	3
MGT 212	Special Problems in Business	1		16	1
OFC 160	Office Machines	3		48	3
OFC 172	Beginning Typing	2	3	80	3
BUS 237	Organizational Behavior	3		48	3

SMALL BUSINESS MANAGEMENT OPTION		LEC. HRS.	LAB HRS.	CONT. HRS.	CR. HRS.
MGT 206	Principles of Marketing	3		48	3
MGT 153	Small Business Management	3		48	3
MGT 157	Small Business Bookkeeping & Accounting Practices	3		48	3
MGT 210	Small Business Organization, Acquisition & Finance	3		48	3
MGT 211	Small Business Operations	3		48	3
MGT 234	Business Law	3		48	3
					18

Plus any additional 9 credit hours of recommended electives listed below.

RECOMMENDED ELECTIVES					
MGT 171	Introduction to Supervision	3		48	3
MGT 242	Personnel Administration	3		48	3
MGT 137	Principles of Retailing	3		48	3
MGT 230	Salesmanship	3		48	3
MGT 233	Advertising and Sales Promotion	3		48	3
MGT 212	Special Problems in Business	1		16	1
OFC 160	Office Machines	3		48	3
OFC 172	Beginning Typing	2	3	80	3
BUS 237	Organizational Behavior	3		48	3

OFFICE CAREERS — GENERAL OFFICE OCCUPATIONS

(Associate Degree of Applied Arts and Sciences)

This two-year program is designed to train persons for entry level positions as word processing operators, machine transcriptionists, and clerk typists. Management principles and human relations are stressed allowing persons to move into positions as word processing supervisors, office managers, or administrative assistants.

Students must complete all of the following:

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
BUS 105	Introduction to Business	3		48	3
ACC 131	Bookkeeping I	3		48	3
or					
ACC 201*	Principles of Accounting I				
*ACC 132	Bookkeeping II	3		48	3
OFC 160	Office Machines	3		48	3
OFC 162	Office Procedures	3		48	3
OFC 165	Word Processing	3		48	3
†OFC 172	Beginning Typing	2	3	80	3
OFC 174	Intermediate Typing	1	2	48	2
OFC 231	Business Communications	3		48	3
BUS 234	Business Law	3		48	3
or					
CS 175	Introduction to Computing Science				
BUS 237	Organizational Behavior	3		48	3
OFC 265	Word Processing Procedures and Practices	3		48	3
OFC 273	Advanced Typing	1	2	48	2
OFC 703	Cooperative Work Experience	1	15	256	3
OFC 713	Cooperative Work Experience	1	15	256	3
					43

*Students completeing BUS 201-Principles of Accounting I, will not need to take Bookkeeping II. They may take another of the recommended electives.

†Students may go into BUS 174-Intermediate Typing, if speed is 30 w.p.m.

REQUIRED SUPPORT COURSES					
COM 131	Applied Composition and Speech	3		48	3
or					
ENG 101	Composition and Expository Reading				
COM 132	Applied Composition and Speech	3		48	3
or					
ENG 102	Composition and Literature				
MTH 130	Business Mathematics	3		48	3
PSY 131	Human Relations	3		48	3
					12

Plus any additional 6 credit hours of recommended electives below.

RECOMMENDED ELECTIVES:					
MGT 136	Principles of Management	3		48	3
ECO 201	Principles of Economics I	3		48	3
PSY 105	Introduction to Psychology	3		48	3
SOC 101	Introduction to Sociology	3		48	3
OFC 803	Cooperative Work Experience	1	15	256	3
OFC 804	Cooperative Work Experience	1	20	336	4
OFC 256	Office Management	3		48	3
OFC 275	Secretarial Procedures	3		48	3
OFC 143	Comtemporary Topics in Office Careers	1		16	1

Those students who plan to continue their education in Office Careers in pursuit of a Baccalaureate Degree should consult a counselor on entering this program.

OFFICE CAREERS — GENERAL SECRETARY

(One-Year Certificate Program)

The purpose of this program is to prepare students with the basic skills necessary to enter the secretarial field.

Students must complete all of the following:

	REQUIRED CORE COURSES	LEC.	LAB	CONT. HRS.	CR. HRS.
BUS 105	Introduction to Business	3		48	3
ACC 131	Bookkeeping I	3		48	3
or					
ACC 201	Principles of Accounting I				
OFC 159	Beginning Shorthand*	3	2	80	4
or					
OFC 166	Intermediate Shorthand				
OFC 160	Office Machines	3		48	3
OFC 162	Office Procedures	3		48	3
OFC 165	Introduction to Word Processing	3		48	3
OFC 166	Intermediate Shorthand**	3	2	80	4
or					
OFC 266	Advanced Shorthand				
OFC 172	Beginning Typing	2	3	80	3
or					
OFC 174	Intermediate Typing				
OFC 174	Intermediate Typing	1	2	48	2
or					
OFC 273	Advanced Typing				
OFC 231	Business Communications	3		48	3
					31
	REQUIRED SUPPORT COURSES				
COM 131	Applied Composition and Speech	3		48	3
or					
ENG 101	Composition and Expository Reading				
MTH 130	Business Mathematics	3		48	3
					6
	RECOMMENDED ELECTIVES:				
CS 175	Introduction to Computing Science	3		48	3

Students with previous training will be placed according to ability. A student is required to have his last semester of typing and shorthand at Mountain View College to complete this program.

*OFC 103 Speedwriting Theory may be substituted for OFC 159.

**OFC 104 Speedwriting Dictation and Transcription may be substituted for OFC 166.

OFFICE CAREERS — OFFICE SKILLS AND SYSTEMS

(One-Year Certificate Program)

This program is designed to meet the needs of those students who desire to enter the business world in a minimum of time. Intensive training in the basic office skills and systems is provided — including office machines, communications systems, records management, and other related business subjects. A general orientation to the business world is given. Personal development, human relations, business etiquette, and ethics are also stressed.

Students must complete all of the following:

	REQUIRED CORE COURSES	LEC.	LAB	CONT. HRS.	CR. HRS.
BUS 105	Introduction to Business	3		48	3
ACC 131	Bookkeeping I	3		48	3
or					
ACC 201	Principles of Accounting I				
*OFC 160	Office Machines	3		48	3
OFC 162	Office Procedures	3		48	3
OFC 165	Introduction to Word Processing	3		48	3
OFC 172	Beginning Typing	2	3	80	3
or					
OFC 174	Intermediate Typing				
*OFC 174	Intermediate Typing	1	2	48	2
or					
OFC 273	Advanced Typing				
OFC 231	Business Communications	3		48	3
					23
	REQUIRED SUPPORT COURSES				
COM 131	Applied Composition and Speech	3		48	3
or					
ENG 101	Composition and Expository Reading				
COM 132	Applied Composition and Speech	3		48	3
or					
ENG 102	Composition and Literature				
MTH 130	Business Math	3		48	3
					9

*Indicates courses which are open for enrollment 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 prerequisites.

OFFICE CAREERS — PROFESSIONAL SECRETARY

(Associate Degree of Applied Arts and Sciences)

The purpose of this program is to prepare students to become alert and responsive secretaries capable of performing the tasks required of them in the modern business office. Suggested electives are such that students may take courses which will allow specialties in secretarial areas such as law, selling, advertising, and accounting.

Students must complete all of the following:

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
BUS 105	Introduction to Business	3		48	3
ACC 131	Bookkeeping I	3		48	3
or					
ACC 201	Principles of Accounting I				
OFC 159	Beginning Shorthand	3	2	80	4
or					
OFC 166	Intermediate Shorthand				
OFC 160	Office Machines	3		48	3
OFC 162	Office Procedures	3		48	3
OFC 165	Introduction to Word Processing	3		48	3
OFC 166	Intermediate Shorthand	3	2	80	4
or					
OFC 266	Advanced Shorthand				
OFC 172	Beginning Typing	2	3	80	3
or					
OFC 174	Intermediate Typing				
Or					
OFC 273	Advanced Typing				
OFC 231	Business Communications	3		48	3
OFC 265	Word Processing Practices & Procedures	3		48	3
OFC 803	Cooperative Work Experience	1	15	256	3
					37

REQUIRED SUPPORT COURSES					
COM 131	Applied Composition and Speech	3		48	3
or					
ENG 101	Composition and Expository Reading				
COM 132	Applied Composition and Speech	3		48	3
or					
ENG 102	Composition and Literature				
CS 175	Introduction to Computing Science	3		48	3
MTH 130	Business Mathematics	3		48	3
					12

Plus any additional 12 credit hours of recommended electives listed below.

RECOMMENDED ELECTIVES:					
MGT 138	Principles of Management	3		48	3
BUS 143	Personal Finance	3		48	3
BUS 234	Business Law	3		48	3
BUS 237	Organizational Behavior	3		48	3
HUM 101	Introduction to Humanities	3		48	3
or	ART 104, MUS 104, THE 101				
PSY 105	Introduction to Psychology	3		48	3
PSY 131	Human Relations	3		48	3
SPE 105	Fundamentals of Public Speaking	3		48	3
OFC 804	Cooperative Work Experience	1	20	336	4
OFC 814	Cooperative Work Experience	1	20	336	4
OFC 143	Contemporary Topics in Office Careers	1		16	1

Those students who plan to continue their education in Office Careers in pursuit of a Baccalaureate Degree should consult a counselor on entering this program.

POSTAL SERVICE ADMINISTRATION

(Associate Degree of Applied Arts and Sciences)

The Postal Services 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 the 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.

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
PSA 110	Introduction to Postal Service	3		48	3
PSA 120	Mail Processing	3		48	3
PSA 122	Customer Services	3		48	3
PSA 125	Postal Economics and Finance	3		48	3
PSA 210	Labor Relations	3		48	3
PSA 212	Employee Services	3		48	3
PSA 214	Postal Problems Analysis	3		48	3
MGT 171	Introduction to Supervision	3		48	3
MGT 242	Personnel Administration	3		48	3
					27

REQUIRED SUPPORT COURSES					
COM 131	Applied Composition and Speech	3		48	3
COM 132	Applied Composition and Speech	3		48	3
PSY 131	Human Relations	3		48	3
CS 175	Introduction to Computing Science	3		48	3
PSY 105	Introduction to Psychology	3		48	3
GVT 201	American Government	3		48	3
MTH 130	Business Mathematics	3		48	3
SOC 101	Introduction to Sociology	3		48	3
BUS 237	Organizational Behavior	3		48	3
*PSY 202	Applied Psychology	3		48	3
					27

Plus any additional 6 credit hours selected from the following:

RECOMMENDED ELECTIVES:

BUS 105	Introduction to Business	3		48	3
HST 101	History of the United States	3		48	3
PEH 257	Advanced First Aid & Emergency Care	3		48	3
MGT 136	Principles of Management	3		48	3
ECO 201	Principles of Economics I	3		48	3
HUM 101	Introduction to Humanities	3		48	3
OR	ART 104, MUS 104, or THE 101				

*To be taken after completion of PSY 105

Those students who plan to continue their education in Postal Service Administration in pursuit of a Baccalaureate Degree should consult a counselor on entering this program.

WELDING TECHNOLOGY

(Associate Degree of Applied Arts and Sciences)

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.

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.

Students must complete all of the following:

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
WE 130	Pattern Layout	2	3	80	3
WE 140	Oxyacetylene Welding I	1	7	32	1
WE 141	Oxyacetylene Welding II	1	7	32	1
WE 142	Oxyacetylene Braze Welding	1	7	32	1
WE 143	Shielded Metal-Arc Welding I	1	7	32	1
WE 144	Shielded Metal-Arc Welding II	1	7	32	1
WE 145	Plate Welding	1	7	64	2
WE 147	Micro-Wire Welding I	1	7	64	2
WE 148	Semiautomatic Arc Welding I	1	7	32	1
WE 149	Gas Tungsten Arc Welding (TIG) I	1	7	64	2
WE 150	Basic Welding Metallurgy	3		48	3
WE 240	Pipe Welding I	1	7	64	2
WE 241	Plate Welding II	1	7	64	2
WE 242	Gas Tungsten Arc Welding (TIG) II	1	64	7	2
WE 243	Semiautomatic Arc Welding II (Flux Core)	1	7	64	2
WE 244	Micro-Wire Welding II (Pipe)	1	7	64	2
MS 151	Basic Machine Operation for Weld Tooling	1	4	80	3
					31

REQUIRED SUPPORT COURSES					
COM 131	Applied Composition and Speech	3		48	3
DFT 182	Technical Drafting	1	3	64	2
ET 235	Fundamentals of Electricity	3	3	96	4
MTH 195	Technical Mathematics	3		48	3
					12

Plus any additional 21 credit hours of recommended electives listed below.

RECOMMENDED ELECTIVES:					
BPR 177	Blueprint Reading	1	3	64	2
BUS 105	Introduction to Business	3		48	3
CHM 115	General Chemistry	3	3	96	4
EGR 186	Manufacturing Processes	1	2	48	2
MTH 196	Technical Mathematics	3		48	3
PHY 131	Applied Physics	3	3	96	4
PSY 131	Human Relations	3		48	3
SS 131	American Civilization	3		48	3
WE 146	Plasma-Arc Welding I	1	7	32	1
WE 245	Plasma-Arc Welding II	1	7	32	1
WE 246	Pipe Welding II	1	7	64	2
WE 247	Manual Submerged Arc Welding	1	7	32	1
WE 248	Specialized Welding Application I	1	7	64	2
WE 249	Specific Code Competency Preparation	1	7	64	2
WE 250	Specialized Welding Application II	1	7	64	2
WE 251	Applied Welding Metallurgy	3		48	3

Cooperative Work Experience — (Students may take a total of 12 credit hours in the Cooperative Work Experience Program.)

Those students who plan to continue their education in Welding Technology in pursuit of a Baccalaureate Degree should consult a counselor on entering this program.

WELDING TECHNOLOGY

(Associate Degree of Applied Arts and Sciences)
Parallel Curriculum Pattern for Veteran Students

REQUIRED CORE COURSES		LEC.	LAB	CONT. HRS.	CR. HRS.
WE 120	Oxyacetylene Welding (WE 140,141, 142)	1	5	96	3
WE 121	Introduction to Shielded Metal-Arc Plate Welding (WE 143, 144, 145)	1	7	128	4
WE 122	Semiautomatic Welding I (WE 147, 148)	1	5	96	3
WE 123	Combination Arc Welding I (WE 149, 241)	1	7	128	4
WE 124	Combination Pipe Welding I (WE 240, 244)	1	7	128	4
WE 125	Combination Gas Shielded Arc Welding (WE 242, 243)	1	7	128	4
WE 130	Pattern Layout	2	3	80	3
WE 150	Basic Welding Metallurgy	3		48	3
MS 151	Basic Machine Operation for Weld Tooling	1	4	80	3
					31

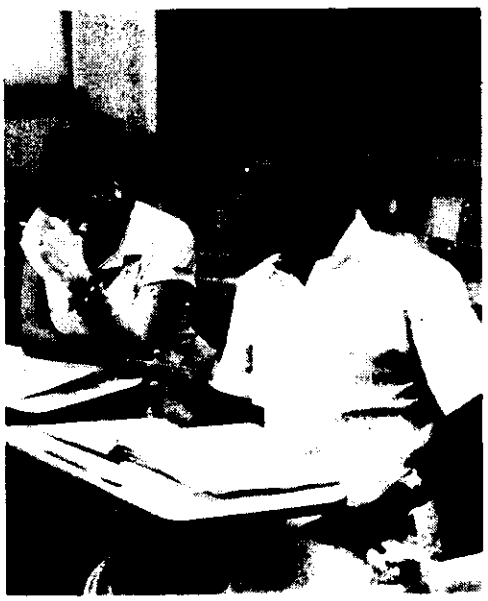
REQUIRED SUPPORT COURSES					
COM 131	Applied Composition and Speech	3		48	3
DFT 182	Technical Drafting	1	3	64	2
ET 235	Fundamentals of Electricity	3	3	96	4
MTH 195	Technical Mathematics	3		48	3
					12

Plus any additional 21 credit hours of recommended electives listed below.

RECOMMENDED ELECTIVES:					
BPR 177	Blueprint Reading	1	3	64	2
BUS 105	Introduction to Business	3		48	3
CHM 115	General Chemistry	3	3	96	4
EGR 189	Characteristics and Strengths of Materials	3		48	3
MTH 196	Technical Mathematics	3		48	3
PHY 131	Applied Physics	3	3	96	4
PSY 131	Human Relations	3		48	3
SS 131	American Civilization	3		48	3
WE 146	Plasma-Arc Welding I	1	7	32	1
WE 245	Plasma-Arc Welding II	1	7	32	1
WE 246	Pipe Welding II	1	7	64	2
WE 247	Manual Submerged Arc Welding	1	7	32	1
WE 248	Specialized Welding Application I	1	7	64	2
WE 249	Specific Code Competency Preparation	1	7	64	2
WE 250	Specialized Welding Application II	1	7	64	2
WE 251	Applied Welding Metallurgy	3		48	3

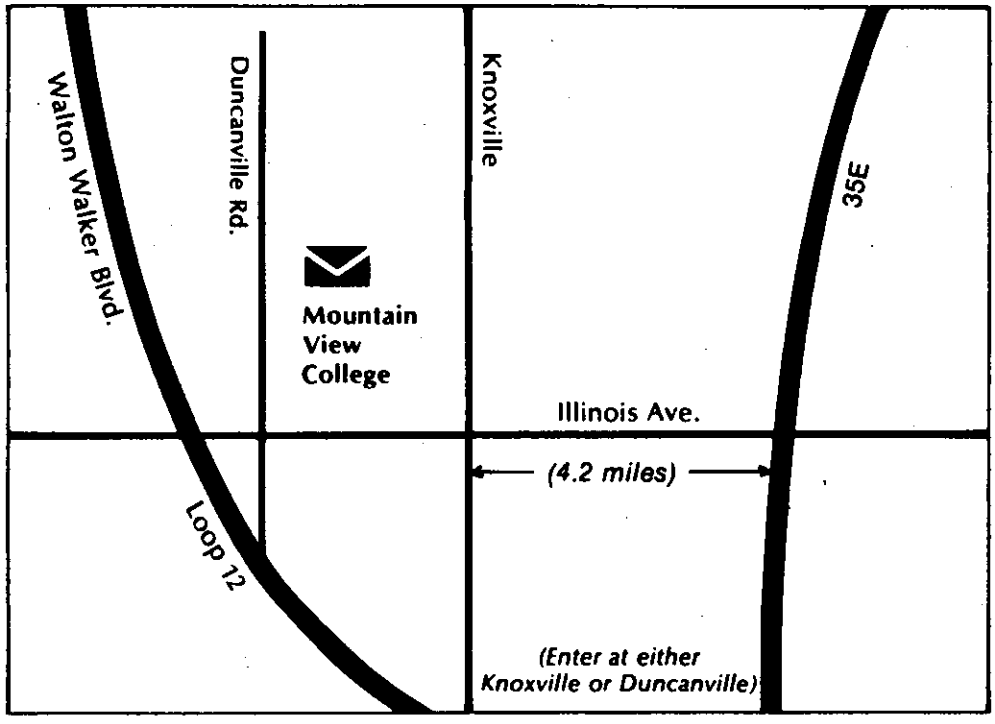
Cooperative Work Experience — (Students may take a total of 12 credit hours in the Cooperative Work Experience Program.)

Thoses students who plan to continue their education in Welding Technology in pursuit of a Baccalaureate Degree should consult a counselor on entering this program.



MOUNTAIN VIEW COLLEGE
INDEX

Mountain View College 4849 W. Illinois Ave., Dallas, Texas 75211



Mountain View College
of the Dallas County Community College District
4849 W. Illinois Ave.
Dallas, Texas 75211
An Equal Opportunity Institution