COLLEGE CATALOG

1982-83

Dallas County Community College District

All blank pages have been removed from this document.

EASTFIELD COLLEGE

Eastfield College serves the eastern part of Dallas County, including East Dallas, Garland, and Mesquite. Sometimes known as the "Educational Village" because of its unique architecture, it is located on 244 acres at the intersection at Interstate 30 and Motley Drive in Mesquite. Eastfield began operation in 1970 and has continually strived to assess the educational and cultural needs of students and the community in order to provide the finest in educational services.

Eastfield provides a full range of Academic Transfer programs balanced with Technical/Occupation Programs that are designed to equip students for rewarding careers in Metroplex businesses and industries. In addition, thousands of people each semester find rewarding growth opportunities through the extensive Community Service course offerings.

The Eastfield campus rises impressively from the plains of eastern Dallas County and is the scene of many seasonal athletic events held on its beautiful grass covered playing fields.

Functional building clusters give students easy access to classrooms and labs and the overall aesthetic effect has earned Eastfield several architectural awards of excellence. The careful landscape planning includes many trees, shrubs and terraced areas as well as a beautiful outdoor swimming pool. In addition, the campus boasts an outstanding performance hall which serves the community for a variety of fine arts events.

Accreditation

Eastfield College is a member of

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

Eastfield 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.

ACADEMIC CALENDAR

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

FALL SEMESTER, 1982

Aug. 18 (W)	Faculty reports
Aug. 19, 20, 23 (RFM)	Registration
Aug. 24 (T)	Faculty development
Aug. 25 (W)	Classes begin
Aug. 28 (S)	Saturday classes begin
Sept. 1 (W)	Last day for tuition refund
Sept. 6 (M)	Labor Day holiday
Sept. 8 (W)	12th class day
Nov. 25 (R)	Thanksgiving holidays begin
Nov. 29 (M)	Classes resume
Nov. 30 (T)	Last day to withdraw "W"
Dec. 15 (W)	Last day of classes
Dec. 16-17, 20-21 (RFMT)	Final examinations
Dec. 18 (S)	Final exams, Sat. classes
Dec. 21 (T)	Semester closes

SPRING SEMESTER, 1983

Jan. 10 (M)	Faculty reports
Jan. 11-13 (TWR)	Registration
Jan. 14 (F)	Faculty development
Jan. 15 (S)	Saturday classes begin
Jan. 17 (M)	Classes begin
Jan. 24 (M)	Last day for tuition refund
Jan. 28 (F)	12th class day
Feb. 17 (R)	District Conference Day
Feb. 18 (F)	Faculty development
Mar. 14 (M)	Spring break begins
Mar. 18 (F)	Spring holiday for all employees
Mar. 21 (M)	Classes resume
Apr. 1 (F)	Easter Holidays begin
Apr. 4 (M)	Classes resume
May 6 (F)	Last day to withdraw "W"
May 13 (F)	Last day of classes
May 14 (S)	Final exams, Sat. classes
May 16-19 (MTWR)	Final examinations
May 19 (R)	Graduation
May 19 (R)	Semester closes

EASTFIELD COLLEGE ADMINISTRATION

President	Eleanor Ott	324-7600
Vice President of Instruction	Jerry Henson	324-7196
Vice President of Student Services	Lee Graupman	324-7610
Vice President of Business Services	Richard A. Solo	324-7603
Associate Dean, Technical/Occupational Programs	Lu McClellen	324-7198
Associate Dean, Learning Resources	Robert L. Lhota	324-7168
Assistant Dean of Community Services Programs	Carolyn Stock	324-7113
Administration Assistant	Felix Zamora	324-7181
Director of Public Information	Vicki Matustik	324-7629
Director of Student Development	David Amidon	324-7185
Director of Counseling	Larry G. Carter	324-7106
Director of Admissions and Registrar	Bobbie J. Trout	324-7100
Director of Financial Aids and Placement	Furman Milton	324-7188
Director of Health Services	Cheri Reynolds	324-7190

DIVISION CHAIRPERSONS

Business	Victor Rizzo	324-7116
Communication, Developmental Studies	Karin Lemme	324-7124
Humanities	John Stewart	324-7132
Math and Engineering	John Daigh	324-7672
Physical Education and Technology	Wilbur Dennis	324-7140
Science and Technology	Edward Ruggiero	324-7143
Social Science and Human Services	Richard Cinclair	324-7156

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 Pike
Associate Vice Chancellor of Business Affairs . . . . . Ted B. Hughes
Vice Chancellor of Educational Affairs . . . . . Terry O'Banion
Associate Vice Chancellor of Educational Affairs . . . . . Ruth Shaw
Assistant Chancellor of Planning . . . . . Bill Tucker
Assistant to the Chancellor . . . . . Jackie Caswell
Director of Development . . . . . Carole Shlipak
Legal Counsel . . . . . Robert Young
Special Assistant to the Chancellor . . . . . Lehman E. Marks
Director of Business Services . . . . . Robb Dean
Director, Center for Telecommunications . . . . . Rodger Pool
Director of Computer Services . . . . . Jim Hill
Director of Community & Student Programs . . . . . Richard McCrary
Director of Facilities Management . . . . . Edward Bogard
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 Resource Development . . . . . Bonny Franke
Director of Technical Services . . . . . Paul Dumont

Allison, Joe F. ..... Mathematics
Stephen F. Austin State College, B.S.; Texas A&M Univ., M.Ed., Ph.D.

Amidon, David C. Jr. ..... Director of Student Development
Univ. of Houston, B.A., M.Ed., Further Study, East Texas State Univ.

Arnold, Jackie ..... Auto Body
Study, East Texas State Univ., Paris Junior College, General Motors

Attner, Donnelle K. ..... Mid-Management
Univ. of North Carolina at Chapel Hill, B.A.; Univ. of Oklahoma, M.Ed.

Bailey, Kenneth ..... Graphic Arts

Balvin, Kenneth ..... Physical Education
Springfield College, B.S., M.S.; Further Study, Ohio State Univ., Azusa Pacific College

Baynham, James D. ..... Mid-Management
Eastfield College, A.A.S.; Abilene Christian Univ., B.B.A., M.S.

Bennett, James R. ..... Developmental Mathematics
Univ. of Texas at Austin, B.A.; Univ. of Houston, M.S.; Further Study, East Texas State Univ.

Blair, Oscar T. ..... Physical Education
North Texas State Univ., B.S., M.S.; Further study, North Texas State Univ., Texas Woman's Univ., East Texas State Univ.

Boldt, Chris E. ..... Mathematics
Texas Tech Univ., B.B.A; Texas Christian Univ., M.S.; East Texas State Univ., Ed.D.; Further study, Texas Christian Univ., North Texas State Univ., Univ. of Texas at Austin, Syracuse Univ., Univ. of Colorado, Univ. of Hawaii, Stanford Univ.

Bowers, James ..... Developmental Reading
Arizona State Univ., B.A., M.A.

Bradshaw, Curt ..... Jazz
Northern Iowa, B.S.; North Texas State Univ., M.M.

Bradshaw, Patti J. ..... Child Development
North Texas State Univ., B.S., M.Ed.

Brown, Beverlye ..... English
Birmingham Southern College, B.S.; Univ. of Alabama, M.A.; Further study, East Texas State Univ., North Texas State Univ.

Brown, Emmett D. ..... Counseling
North Texas State Univ., B.A., M.Ed.; Further study, El Centro College, Prairie View A&M, Naval School of Photography

Brumbach, Virginia ..... English
Cumberland College, A.A., Western Kentucky State Univ., B.A.; Baylor Univ., M.A., North Texas State Univ., Ed.D; Post-doctoral, Texas Tech Univ., North Texas State Univ., Texas Christian Univ.

Burden, Jacqueline ..... History
State Univ. of New York College at Buffalo, B.A.; Univ. of Michigan, M.A.; Further study, Univ. of Pittsburgh

Carandang, Amado I. ..... Philosophy
King's College, B.A.; Univ. of Notre Dame, M.A., Ph.D.; Further study California Institute of Asian Studies, San Francisco Brock Univ., Ontario

Carpenter, Robert W. ..... Accounting
North Texas State Univ., B.B.A., M.B.A, C.P.A. State of Texas; Further study, North Texas State Univ., Western State College of Colorado

Carr, Laura V. ..... Training Paraprofessionals for the Deaf Program
Illinois State Univ., B.S.; New York Univ., M.A.; Further study, East Texas State Univ.

Carter, James Damon ..... Automotive Technology
Southern Methodist Univ., NIASE; Further study, General Motors Training Center

Carter, Larry ..... Director of Counseling
Texas Tech Univ., B.B.A.; East Texas State Univ., M.S., Ed.D.

Cate, Franklin M. ..... History
East Texas State Univ., B.A.; Univ. of Virginia, M.A.; Further study: Univ. of Texas, Vanderbilt Univ.

Choate, Charles T. ..... Journalism
Southeastern Oklahoma State. B.A.; East Texas State Univ., M.S.; Further study: San Francisco State Univ., East Texas State Univ.

Christian, Allen L. ..... Mathematics
Arlington State College. B.S.; East Texas State Univ., M.S.; North Texas State Univ., Ed.D.

Cinclair, Richard ..... Division Chairman, Social Science
Northern State College., B.S.; Univ. of Wisconsin, M.S.; Ball State Univ., Ph.D.

Clarke, Curtis R. ..... Mid-Management
Southern Methodist Univ., B.B.A., M.B.A.; Further study: Southern Methodist Univ., North Texas State Univ., Univ. of Texas at Arlington

Clayton, Glenn N., Jr. ..... English
North Texas State Univ., B.A., M.A.; Further study: East Texas State Univ., North Texas State Univ.

Clinton, Doyle L. ..... Spanish
Univ. of Southern Mississippi, B.A.; Univ. of Alabama, M.A.; Further study: Louisiana State Univ.

Daigh, John D. ..... Division Chairman, Mathematics and Engineering
United States Military Academy. B.S.; Univ. of Illinois, M.S., Ph.D.; Professional Engineer Registration

Dale, Charles W. ..... Electronics
Southeastern State College of Oklahoma, B.S.; Southern Illinois Univ., M.S.; East Texas State Univ., Ed.D.

Dennis, Vivian A. ..... Mathematics
East Texas State Univ., B.A., M.S., D.Ed.; Further study: North Texas State Univ.

Dennis, Wilbur L. ..... Division Chairman, Physical Education
North Texas State Univ., B.S., M.S., M.Ed.: Further study: East Texas State Univ.

DiPietro, Lawrence N. ..... Learning Resource Center
Rutgers Univ., B.A., Drexel Univ., M.S.L.S.; Further study: North Texas State Univ.

Drake, Helan N. ..... English
Southern Methodist Univ., B.A.; North Texas State Univ., M.A.; Further study: East Texas State Univ.

Erwin, Robert J. ..... Theatre
Univ. of South Florida, B.A.; Univ. of Alberta, M.F.A.; Further study: Paul Mann's Acting Workshop, New York City

Etheredge, John W. ..... Counseling
Baylor Univ., B.A., M.S.; Further study: Univ. of Houston, Baylor Univ., Texas A&M Univ.

Ewing, George E. ..... Drafting
North Texas State Univ., B.S., M.S.; Univ. of Arkansas, Ed.D.

Felder, Bob ..... Business
Sam Houston State Univ., B.A., M.A.

Flickner, Robert E. ..... Physical Education
Bethel College, B.S.; Kansas Univ., M.S.

Forrest, Mary L. ..... Speech
North Texas State Univ., B.A.; Southern Methodist Univ., M.F.A.; Further study: North Texas State Univ.

Fountaine, Oliver J. ..... Mathematics
Tillotson College, B.S.; Univ of Denver, M.A.

Gormly, Donna A. ..... English
Texas Woman's Univ., B.A., M.A.; Further study: Texas Christian Univ.

Graupman, Lee ..... Vice President of Student Services
LaCrosse State Univ., B.S.; Western State College of Colorado, M.A.; Further study, Fresno State College, San Francisco State College

Hall, Harvey ..... Air Conditioning and Refrigeration

Hamilton, Hance H. ..... Chemistry
Texas A&M Univ., B.S., Ph.D.

Hegar, E. Alylene ..... Counselor, Psychology
Texas Tech Univ., B.A.; North Texas State Univ., M.Ed., Ed.D.

Helton, Charles E. ..... Director of Appraisal Center/CAI Lab
East Texas State Univ., B.S.; Further study: East Texas State Univ.

Henry, Robert M. ..... Physical Education
Southern Methodist Univ., B.A.; Univ. of Illinois, M,S.; Further study: Univ. of Texas, North Texas State Univ., East Texas State Univ., Texas Tech Univ., Texas A&M Univ.

Henson, Jerry C. ..... Vice President of Instruction
Hardin-Simmons Univ., B.A.; Southwestern Baptist Theological Seminary, B.D.; Baylor Univ., Ph.D.

Herd, Clarence W. ..... Automotive Technology
East Texas State Univ., B.A.; Further study: East Texas State Univ.

Hill, H. Rayburn ..... Government
Paris Junior College, A.A.; East Texas State Univ., B.S., M.S.; Further study, Univ. of Oklahoma, East Texas State Univ.

Hinkle, John L. ..... English
Baylor Univ., B.A.; East Texas State Univ., M.A.; Further study: Baylor Univ., East Texas State Univ.

Holloway, Ralph ..... Director of Instructional Development
Amarillo College, A.A.; Hardin-Simmons Univ., B.A.; North Texas State Univ., M.L.S.; Further study: University of Texas at Austin, East Texas State Univ.

Holman, Morris H. ..... History
East Texas State Univ., B.A., M.A.: Dallas Theological Seminary, M.A.B.S.; Further study: North Texas State Univ.

Holt, Diane R. ..... Sociology
Univ. of Utah, B.S., M.S.; Union Graduate School, Ph.D.; Further study: Univ. of California at Los Angeles, San Diego State Univ.

Hughes, W. Tim Jr. ..... History, Government
Henderson State Teachers College, B.S.E.; George Peabody College for Teachers, M.A.; Further study: Baylor Univ., East Texas State Univ., Univ. of the Americas, Texas A&M Univ.

Hutchins, Michael E. ..... Drafting
East Texas State Univ., B.S., M.S., Ed.D.

Jeffus, Larry ..... Welding
Hiwassee College, A.A.; Univ. of Tennessee, B.S.; Further study, Univ. of Tennessee

Jessen, Joel A. ..... Counselor
Univ. of Iowa, B.A., M.A.

John, Margaret ..... Counselor
Austin College, B.A.; East Texas State Univ., M.A.

Karner, Albert M. ..... Air Conditioning and Refrigeration
Study: Univ. of Oklahoma, Oklahoma State Univ., Univ. of Tulsa

Kennedy, Pat ..... Child Development
North Texas State Univ., B.A., M.S.

King, H. Gill ..... Anthropology, Biology
Southern Methodist Univ., B.A., M.A., Ph.D.

Kirkpatrick, James Michael ..... Drafting
Oklahoma City Univ., B.I.A.; North Texas State Univ., M.Ed., Ed.D.

Knight, Carl E. ..... Biology
Michigan State Univ., B.S., M.S., Ph.D.

Koeppen, Larry G. ..... Counselor
North Texas State Univ., B.S., M.Ed.; Further study: North Texas State Univ.

Kugler, Ellen ..... Assistant Director of Student Development
Colorado State Univ., B.A., M.Ed.

Latham, Jim ..... Auto Body Technology
East Texas State Univ., B.A.; Further study: East Texas State Univ., Texas A&M Univ.

Lemme, Karin ..... Division Chairman, Communications/Developmental Studies
Northern Illinois Univ., B.S.; Illinois State Univ., M.S.; Further study: East Texas State Univ.

Lhota, Bob ..... Associate Dean, LRC
St. Vincent College, B.A., M.A.; Univ. of Pittsburgh, M.L.S.; Pacific Western Univ., Ph.D.

Lopez, Frank ..... Mathematics
Southwest Texas State College, B.S.; Univ. of Texas at Austin, M.A.; Further study: Texas A&M Univ.

Lucky, Harrell C. ..... Music
Bethany Nazarene College, B.M.Ed.; Southwestern Baptist Seminary, M.C.M., D.M.E.; Further study: Academy of Music, Vienna, Austria

Lynch, Maurice ..... Director of Physical Plant

Madriguera, Enric F. ..... Music
Royal Conservatory of Music, Madrid, Spain; Oscar Espla Conservatory of Music, Alicante, Spain; East Carolina Univ.

Martin, Diane M. ..... English
North Texas State Univ., B.A.; California State College at Fullerton, M.A.; Further study: East Texas State Univ., Univ. of Texas at Austin

Martinez, Ivan D. ..... Government
Florida State Univ., B.A., M.S.

Massey, Aaron W. ..... Counselor
Southwest Texas State, B.S.; East Texas State Univ., M.S.; Further study: East Texas State Univ., North Texas State Univ., Abilene Christian Univ., Texas A&M Univ.

Mathus, Don L. ..... Physical Education
South Plains College, A.A.; Texas Tech Univ., B.S., M.S.; Further study: North Texas State Univ.

Matustik, Vicki B. ..... Director of Public Information
North Texas State Univ., B.A.

Matzen, Brent E. ..... Art
Southwestern Univ., B.A.; Univ. of Dallas, M.A., M.F.A.

McAden, Winston ..... Air Conditioning and Refrigeration
Texas Tech Univ., B.S.; Further study: Southern Methodist Univ.

McClellen, Lu ..... Associate Dean, Technical/Occupational Programs
Baylor Univ., B.A.; East Texas State Univ., M.Ed., Ed.D.

McClung, Ray O. ..... Counselor, Psychology
Texas A&M Univ., B.S.; Univ of Illinois, M.S.; North Texas State Univ., Ph.D.

McCoy, David L. ..... Photography
Southeastern State College of Oklahoma, B.A.; East Texas State Univ., M.S., Ph.D.

McMahon, Jerry D. ..... Chemistry
Texas Tech Univ., B.S.; Princeton Univ., M.A.

McNeill, Earldene ..... Child Development
North Texas State Univ., B.S.; Southern Methodist Univ., M.L.A.

Milton, Furman D. ..... Director of Financial Aids and Placement
Troy State Univ., B.S., East Texas State Univ., M.Ed., Ph.D.

Moorhead, Michael ..... English
Texas Tech Univ., B.A., M.A.; Further study: Texas Tech Univ.

Mouledous, Pierrette M. ..... Piano
Performer's Certificate, Ecole Normale de Musique, Southern Methodist Univ., M.M.

Neil, Mary Lou ..... English
Texas Christian Univ., B.A.; Univ. of Dallas, M.A.; Further study: Univ. of Dallas

Olson, Margot ..... Instructional Development Consultant
Carnegie-Mellon Univ., B.S.; Florida State Univ., M.S., Ph.D.

Ott, Eleanor ..... President
Rice Univ., B.A.; Southern Methodist Univ., M.A.

Palmar, Ursula J. ..... Training Paraprofessionals for the Deaf Program
Salve Regina College, B.A.; Univ. of Arizona, M.S.; Further study: Univ. of Arizona

Penney, Jane A. ..... Sociology/Human Services
East Texas State Univ., B.S., M.S.

Phillips, Harry ..... Music
State Univ. College at Potsdam, New York, B.S.; Univ. of Michigan, M.M.; Boston Univ., Mus. A.D.

Phillips, Jim G. ..... Counselor
East Texas State Univ., B.A., M.A., Ph.D.; Further study: North Texas State Univ.

Pilot, Theo ..... Child Development
University of Maryland, B.S.; Texas Woman's Univ., M.S.

Pitt, J. Michael ..... Physics
Southern Methodist Univ., B.S.E.E.; Univ of Texas at Austin, Ph.D.

Pleasant, P. Leon Jr. ..... Accounting
North Texas State Univ., B.B.A.; East Texas State Univ., M.B.A.; Further study: East Texas State Univ.

Preston, David E. ..... Sociology
East Texas State Univ., B.S., M.S.; North Texas State Univ., Ed.D.

Priest, Andy J. ..... Automotive Technology and Engineering
North Texas State Univ., B.S.; Southern Methodist Univ., M.L.A.; Further study: East Texas State Univ.

Privette, Parnell ..... Electronics
Univ. of Texas at Austin, B.S.E.E.

Purdy, Earlyne ..... Secretarial Science
North Texas State Univ., B.S.; East Texas State Univ., M.S.

Rawlins, John Clayton ..... Electronics
Southern Methodist Univ., B.S.E.E.; East Texas State Univ., M.S.Ed.

Reeves, Ed R. ..... Biology
West Texas Univ., B.S.; East Texas State Univ., M.S.; Further study: Texas Tech Univ.

Reynolds, Cheri ..... Director of Health Services
Texas Woman's Univ., B.S.; Further study: Texas Woman's Univ.

Rice, Nina D. ..... Physical Education
Univ. of Central Arkansas, B.S.; George Peabody College, M.A.; Texas Woman's Univ., Ph.D.

Richardson, Douglas M. ..... Mid-Management
North Texas State Univ., B.B.A., M.B.A.; Further study: East Texas State Univ.

Rizzo, Victor J. ..... Division Chairman, Business
Southwest Texas State Univ., B.B.A., M.B.A.; North Texas State Univ., Ph.D. Candidate

Robinson, Yvonne ..... Secretarial Science
D.C. Teachers College, B.S.; North Texas State Univ., M.B.E.; East Texas State Univ., Ed.D.

Roy, DeWayne ..... Welding

Ruggiero, Edward ..... Division Chairman, Science
Fordham Univ., B.S.; City Univ. of New York, M.S.; Further study: City Univ. of New York, Univ. of Texas at Dallas

St. Clair, Anita J. ..... Secretarial Science
Abilene Christian College, B.S.E.; North Texas State Univ., M.B.E.; Further study: Southern Methodist Univ., North Texas State Univ., East Texas State Univ.

Sanders, Marja-Terttu ..... Spanish
El Centro College, A.A.; North Texas State Univ., B.A., M.A.; Further study: East Texas State Univ., Texas Tech Univ.

Schmitt, Allan B. ..... Electronics
Univ. of Texas at Austin, B.E.S., M.S.E.E., Ph.D.E.E.

Schrup, Sara J. ..... Art
Art Institute of Chicago, B.F.A.; Univ. of Dallas, M.A., M.F.A.

Scott, Ray R. ..... Physics
North Texas State Univ., B.A.; East Texas State Univ., M.S.; Purdue Univ., M.S.; Further study: East Texas State Univ.

Sharp, Robert G. ..... American History
Whitworth College B.A.; Purdue Univ., M.A.; Further study: Univ. of Denver, Univ of New Mexico

Sherrill, Theodore B. III ..... Biology
Lamar State Univ., B.S.; East Texas State Univ., M.S.; Further study: Southern Methodist Univ., North Texas State Univ., East Texas State Univ.

Shofner, Robert W. ..... English
East Texas State Univ., B.S., M.A.

Slovak, Pauline A. ..... English
Univ. of Arkansas at Monticello, B.S.E.; East Texas State Univ., M.A. Ed, D.

Smith, Maryle Bea ..... Business
North Texas State Univ., B.B.A., M.B.E.; Further study: East Texas State Univ.

Solganick, Harvey ..... English, German Philosophy
North Texas State Univ., B.A., M.Ed., Southern Methodist Univ., M.I.A; Further study: Univ of Texas at Arlington, Univ. of Dallas, Univ. of Texas at Dallas, Univ. of California at Santa Barbara

Solo, Richard A. ..... Vice-President of Business Services
Villanova Univ., B.S., Certified Public Accountant; Further studies: Univ. of Dallas

Starling, Susanne ..... American History
Baylor Univ., B.A.; North Texas State Univ., M.A., Further study North Texas State Univ.

Stewart, John D. ..... Division Chairman, Humanities, Music
East Texas State Univ., B.M.Ed., M.Ed.; Indiana Univ., Ph.D.

Stover, Harryette B. ..... English
Southern Methodist Univ., B.A, M.A.; Further study: North Texas State Univ., East Texas State Univ.

Streeter, C. Allen ..... Engineering
Louisiana State Univ., B.S., M.S.; Further Study: Southern Methodist Univ.; Professional Engineer Registration

Streng, Adolf C., Jr. ..... Psychology
Texas Lutheran College, B.A.: Wartburg Seminary, M.Div.: The Univ. of Chicago, M.A.; Roosevelt Univ., M.A.; Further study: Univ. of Maine, Iowa State Univ., Univ. of Colorado

Swinding, James A. ..... Developmental Reading
Daytona Beach Community College, A.A. Florida State Univ., B.A., M.S,; Further study: Univ. of Nevada, East Texas State Univ.

Thorne, John M. ..... Accounting
East Texas State Univ., B.B.A., M.B.A.; Further Study: Univ. of Oklahoma

Thornton, Carolyn ..... Counseling
Univ. of Cincinnatti, B.A.; East Texas State Univ., M.S.

Tinsley, Sammy J. ..... Developmental Mathematics
Ouachita Baptist Univ., B.A.; Univ of Mississippi, M.S., Ph.D.

Trout, Bobbie ..... Registrar
Univ. of Texas at Austin, B.A.; Univ. of Texas at Dallas, M.A.

Weaver, Gayle M. ..... Biology
East Texas State Univ., B.S., M.S.; Univ of Oklahoma, M.S.; East Texas State Univ., Ph.D.; Further study: Oak Ridge Institute of Nuclear Studies

Weeks, Roger D. ..... Business
East Texas State Univ., B.B.A., M.B.A.; Further study: Univ. of Missouri

Whisnant, Robert A., Jr. ..... Humanities
Univ. of South Florida, B.A., M.A.; Further study: East Texas State Univ.

Williams, Jerome ..... Biology
East Texas State Univ., B.S., M.S.; Further study: East Texas State Univ., North Texas State Univ.

Wilson, Mary C. ..... English
East Texas State Univ., B.A., M.A.; Further study: Texas Christian Univ., Southern Methodist Univ., East Texas State Univ.

Winn, Jerry M. ..... Developmental Mathematics
Oklahoma Univ., B.S.E.E.; Southern Methodist Univ., M.S.

Wisdom, Hardy ..... Auto Body Technology
North Texas State Univ., B.S.

Zamora, Felix ..... Administrative Assistant to the President
School for International Training, B.S.; Southern Methodist Univ., M.P.A.

I. GENERAL INFORMATION

HISTORY OF THE DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

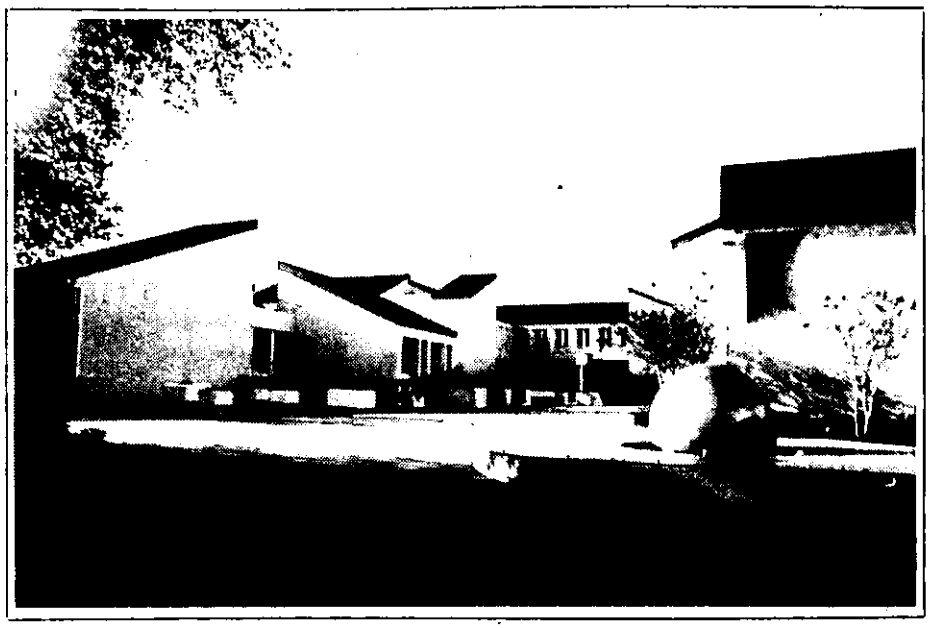
The Dallas County Community College District is comprised of seven colleges located strategically throughout Dallas County. Together the colleges enroll approximately 75,000 students and employ over 1,900 full-time faculty and staff members.

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

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

DISTRICT PHILOSOPHY AND GOALS

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



The needs, abilities, and goals of each student are considered important. The focus is on creating an educational program for the individual rather than squeezing or stretching the individual to fit an "educational mold."

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

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

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

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

DISTRICT RESPONSIBILITIES

To carry out the District philosophy, the colleges obviously must offer a range of programs and courses, including guidance services. These programs and courses must help each individual attain a high level of technical competence and a high level of cultural, intellectual, and social development. In addition, high professional standards for the academic staff must be maintained

within a framework prescribed by the Board of Trustees. At the same time, the program and organization of each college must make maximum use of faculty and facilities.

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

LEAGUE FOR INNOVATION

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

EQUAL EDUCATIONAL AND EMPLOYMENT OPPORTUNITY POLICY

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

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

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

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

STUDENT CONSUMER INFORMATION SERVICES

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

STANDARDS OF CONDUCT

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

II. ADMISSIONS AND REGISTRATION

GENERAL ADMISSIONS POLICY

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

ADMISSION REQUIREMENTS

Beginning Freshmen

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

a. Graduates from an accredited high school or those who have earned a General Education Diploma (G.E.D.), who are 18 years of age or older, and whose high school class has graduated.
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 seniors recommended by their high school principal. The College admits a limited number of students in this category. The students are concurrently enrolled for a maximum of 6 hours of special study each semester. Students must continue to make normal progress toward high school graduation.

Transfer Students

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

Former Students

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

Non-Credit Students

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

International Students

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

admissions requirements are complete. International students must:

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

TUITION

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

ADDITIONAL FEES

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

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT
TUITION AND STUDENT SERVICES FEE*

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

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

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

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

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

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

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

SPECIAL FEES AND CHARGES

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

Physical Education Activity Fee: $5 a semester.

Bowling Class Fee: Student pays cost of lane rental.

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

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

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

* Available only to music majors enrolled for 12 hours or more.
**This fee can change without prior notice.

REFUND POLICY

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

a. No 100% refund is granted unless College error is involved.
b. An 80% refund of tuition and fees may be obtained through the date noted in the college calendar. An 80% refund may be given through the first two class days of a six-week summer session or fast track semester. Refunds for Flexible Entry Courses are considered through completion of the second day of class from the date of enrollment.
c. No refund is given for advanced placement or College Level Examination Program (CLEP) tests.
d. A physician's statement must be submitted along with petitions when medical reasons account for withdrawal. Requests for refunds must be submitted before the end of the semester for which the refund is requested.
e. No refund of less than $4 for tuition and fees is made.

Refund Petition Forms are available in the Counseling Center and the Office of the Vice President of Student Services. Students who believe their refund requests are due to extenuating circumstances beyond the limits of the refund policy should state explicitly their circumstances on the Refund Petition Form. All requests for refunds are referred to the Refund Petition Committee. The Committee's recommendations are made to the Vice President of Student Services who notifies the student of the action taken. Refund checks normally require a minimum of one month from date of approval for processing.

RETURNED CHECKS

Checks returned to the Business Office must be paid with cash or a cashier's check within the time limits prescribed by the notification letter. An additional fee is added for returned checks.
If a check for tuition is returned by a bank for any reason, including stop payment, the college business office may submit the check to the Justice of the Peace for appropriate legal action and collection. The Vice President of Student Services may also implement disciplinary procedures.

ADVISEMENT PROCEDURES

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

COURSE PREREQUISITES

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

CHANGE OF SCHEDULE

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

NON-CREDIT STUDENT (AUDIT)

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

TRANSFER OF CREDITS

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

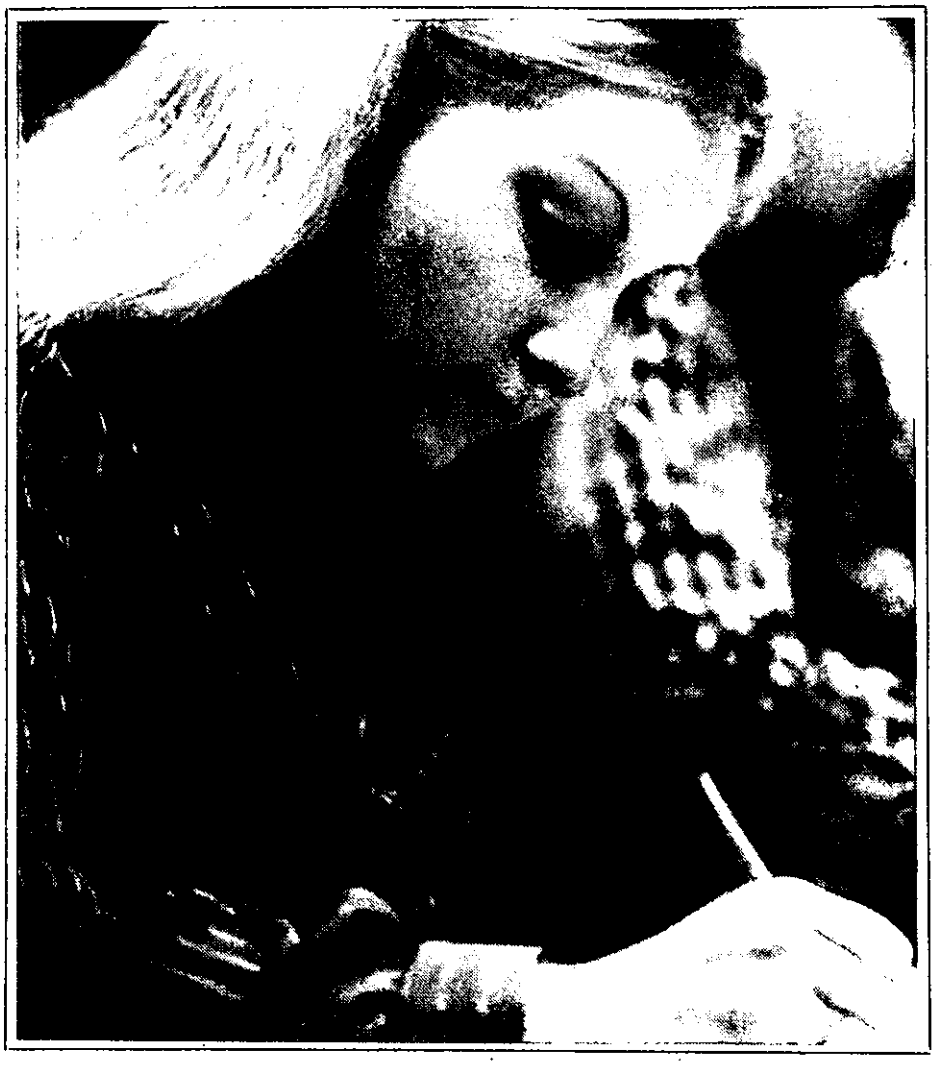
DROPPING A COURSE OR WITHDRAWING FROM COLLEGE

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

ADDRESS CHANGES AND SOCIAL SECURITY NUMBER

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

III. ACADEMIC INFORMATION



DEGREE REQUIREMENTS

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

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

ASSOCIATE IN ARTS AND SCIENCES DEGREE

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

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

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

ASSOCIATE IN APPLIED ARTS AND SCIENCES DEGREE AND CERTIFICATE CAREER PROGRAMS

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

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

PROCEDURE FOR FILING DEGREE AND CERTIFICATE PLANS AND FOR GRADUATION

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

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

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

RECOMMENDED ACADEMIC LOAD

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

CLASS ATTENDANCE

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

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

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

SCHOLASTIC STANDARDS: GRADES AND GRADE POINT AVERAGE

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

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

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

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

$35 \div 12 = 2.93$

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

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

An incomplete grade "I" may be given when an unforeseen emergency prevents a student from completing the work in a course. The "I" must be converted to a performance grade (one with a grade point value) within ninety days after the first day of classes in the subsequent regular semester. If the work is not completed after ninety days, the "I" is converted to a performance grade.

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

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

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 instutition. The academic transfer curriculum is coordinated with senior colleges and universities to facilitate the transfer of credits to these schools.

TECHNICAL/OCCUPATIONAL PROGRAMS

Students who desire to enter a chosen field as a skilled employee after one or two years of college work may enroll in one of the many Technical/Occupational Programs offered by the College. Technical/occupational courses carry college credit leading to a Certificate of Completion or an Associate in Applied Arts and Sciences Degree. These programs are established only after studies verify that employment opportunities will exist at the time the student completes training. The College attempts to match the community's labor requirements with the ambitions and goals of its students. This realistic approach to occupational education is made possible by the excellent cooperation of local industry, business, and public agencies. They increasingly depend on District colleges to supply skilled personnel. A continuous liaison is maintained with prospective employers to help place graduates and to keep the training programs current with job requirements. Recommendations for adding new programs to the College offerings are made periodically and are based on community studies which identify additional training needs.

CREDIT BY EXAMINATION

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

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

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

Credit by examination may be attempted only one time in any given course, and a grade of "C" or better must be earned in order for credit to be recorded. A student may use credit by examination for only three (3) credit hours to apply toward the degree requirements in history and only three (3) credit hours to apply toward the degree requirements in government.
(CLEP exam does not meet this requirement.)

NON-TRADITIONAL LEARNING

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

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

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

FLEXIBLE ENTRY COURSES

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

TELECOURSES

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

are the same as for similar courses taken on campus.

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

COOPERATIVE WORK EXPERIENCE EDUCATION

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

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

To enroll in a Cooperative Work Experience Course, students must have the approval of their instructor/coordinator. Course credit is awarded at the rate of 1 credit hour for each 80 hours of approved work experience during the semester. The 80 hours is approximately 5 hours per week during a fall or spring semester.

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

INTERNATIONAL STUDIES

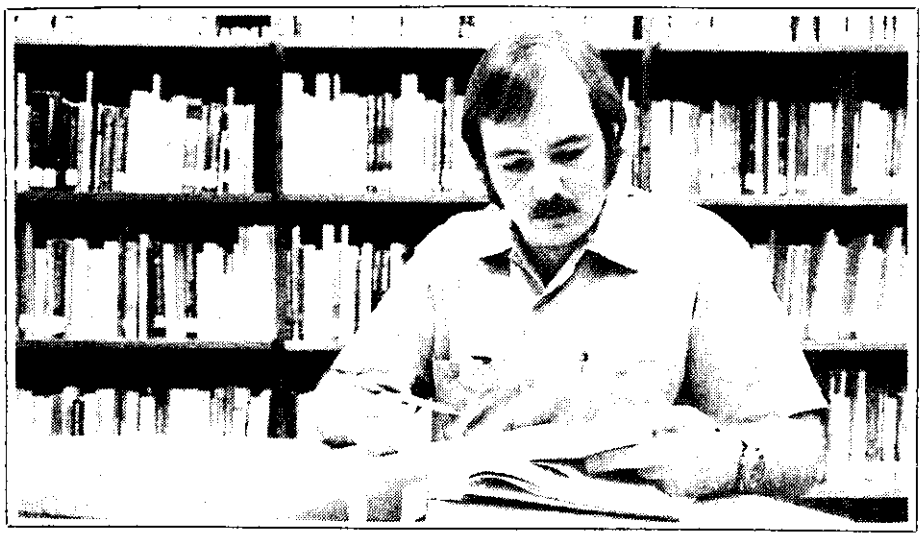
Selected programs combine learning experiences with foreign travel. This travel-study is under the direct supervision of the faculty. These courses support specific learning objectives, and college credit may be earned by students who successfully meet the objectives.

HUMAN DEVELOPMENT

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

EVENING AND WEEKEND COLLEGE

In dynamic, growing communities such as those encompassing this college, people have continuing educational needs, yet many of them have work schedules and personal involvements which make it impossible for them to attend college during normal daytime hours. For this reason, evening and weekend college courses offer the same broad spectrum of programs available for full-time day students. Courses are offered both on campus and at seleced 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 division to provide students with valuable educational experiences. Many programs and activities are offered to help the student develop life enriching skills. Other programs provide students with interesting and entertaining ways to spend leisure time on campus. The goal of all programs is to facilitate the development of cultured and well-rounded human beings. Student participation in the operation of programs is highly encouraged.

GUIDANCE AND COUNSELING SERVICES

Individuals may find the couseling 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 adminsiters various tests. Types of tests include:

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

HEALTH CENTER

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

SERVICES FOR HANDICAPPED STUDENTS

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

STUDENT ORGANIZATIONS

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

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

INTERCOLLEGIATE ATHLETICS

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

INTRAMURAL SPORTS

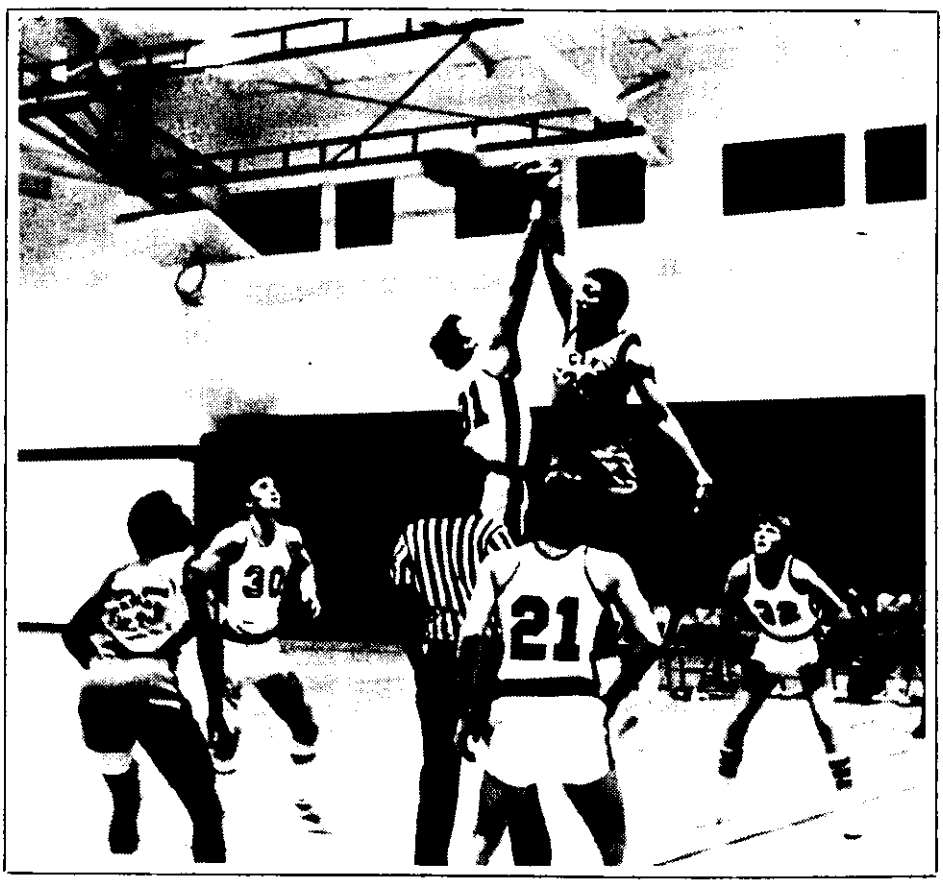
The College provides a campus intramural program for students and staff and encourages participation. For additional information contact the intramural director in the Physical Education Office or the Student Development Office.

HOUSING

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

CAMPUS SECURITY

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



VI. FINANCIAL AID

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

Students needing financial assistance are encouraged to complete an application well in advance of registration for the semester they wish to attend. The Financial Aid Needs Analysis Forms take 4-6 weeks to process. Early application allows the Financial Aid Office to prepare a realistic financial aid package.

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

PELL GRANT

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

All students applying for financial assistance through the College must apply for a PELL Grant. Other types of financial aid may be awarded if the student applies and qualifies. Eligibility for PELL Grant is based on financial need and satisfactory academic progress. Applications and additional information concerning the PELL Grant Program are available in the Financial Aid Office and in the counseling offices of most high schools. The application process takes approximately 4-6 weeks. In response to the PELL Grant application, a Student Aid Report (SAR) will be mailed directly to the student. The student should immediately review the SAR to make sure it is correct and bring it to the Financial Aid Office. The exact amount of the PELL Grant award will depend upon the aid index on the SAR and the number of hours for which the student enrolls. In order to be eligible, a student must enroll for at least 6 credit hours each semester. Students must apply each year.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)

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

TEXAS PUBLIC EDUCATIONAL GRANT (TPEG)

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

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

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

HINSON-HAZLEWOOD COLLEGE STUDENT LOAN PROGRAM

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

Repayment begins 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 9% a year (adjusted).

STUDENT EMPLOYMENT

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

SOCIAL SECURITY ADMINISTRATION

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

BUREAU OF INDIAN AFFAIRS

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

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

VOCATIONAL REHABILITATION

The Texas Rehabilitation Commission offers assistance for tuition and fees to students who are vocationally handicapped as a result of a

physically or mentally disabling condition. This assistance is generally limited to students not receiving other types of aid. For information, contact Texas Rehabilitation Commission, 13612 Midway, Suite 530, Dallas, Texas 75234.

VETERANS' BENEFITS PROGRAM

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

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

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

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 enetered 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.

The 2.0 Grade Point average (GPA) Requirement

a. Students funded for full-time course loads must complete a full-time course load with a minimum GPA of 2.0 each semester an award is made.
b. Students funded for part-time course loads are expected to achieve a minimum GPA of 2.0 on all courses funded each semester. No drops or withdrawals are allowed.

Academic Compliance

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

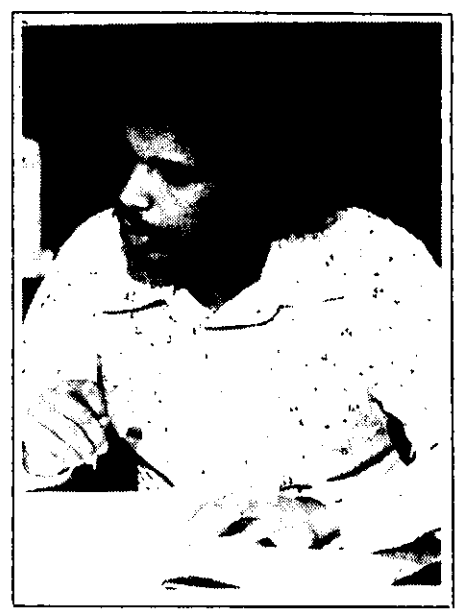
Students may appeal the Financial Aid Director's decisions to the Vice President of Student Service. The appeal must be in writing.
The Financial Aid Office reserves the right to review and cancel awards at any time because of (1) failure to maintain an acceptable academic record. (2) failure to meet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

SHORT-TERM LOANS

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

JOB PLACEMENT SERVICES

The Placement Office is available to assist any student in job placement, either on or off-campus. Job openings are listed in the Placement Office. The Placement Office also works directly with students and community employers to locate jobs and students qualified to fill them. Career placement assistance is available for students nearing the end of their course of study. In addition to listing full-time career opportunities, the Placement Office also assists students in developing resumes, preparing for interviews, and developing successful job search strategies.



enrollment. If the student does not re-enroll, the "WX" is converted to a performance grade.

ACCEPTABLE SCHOLASTIC PERFORMANCE

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

HONORS

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

SCHOLASTIC PROBATION AND SCHOLASTIC SUSPENSION

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

GRADE REPORTS

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

WAIVING OF SCHOLASTIC DEFICIENCY

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

TRANSCRIPTS OF CREDIT

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

CLASSIFICATION OF STUDENTS

Freshman:
A student who has completed fewer than 30 credit hours.

Sophomore:
A student who has completed 30 or more credit hours.

Part-time:
A student carrying fewer than 12 credit hours in a given semester.

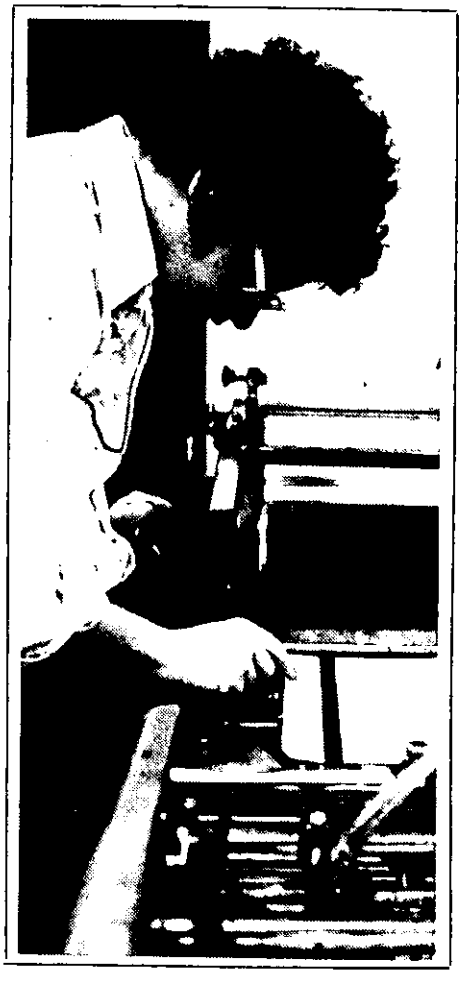
Full-time:
A student carrying 12 or more credit hours in a given semester.

LEARNING RESOURCES CENTER AND LIBRARY OBLIGATIONS

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



VII. STUDENT RIGHTS AND RESPONSIBILITIES

SYNOPSIS:

1. General Provisions
   a. Preamble
   b. Scope
   c. Definitions
2. Acquaintance with Policies, Rules Regulations
3. Campus Regulations
   a. Basic Standard
   b. Enumerated Standards
      (1) Student Identification
      (2) Use of District Facilities
      (3) Speech and Advocacy
      (4) Disruptive Activities
      (5) Alcoholic Beverages
      (6) Drugs
      (7) Gambling
      (8) Hazing
      (9) Academic Dishonesty
      (10) Financial Transactions
      (11) Other Offenses
4. Disciplinary Proceedings
   a. Administrative Disposition
      (1) Investigation
      (2) Summons
      (3) Disposition
   b. Student Discipline Committee
      (1) Composition; Organization
      (2) Notice
      (3) Preliminary Matters
      (4) Procedure
      (5) Evidence
      (6) Record
   c. Faculty-Student Board of Review
      (1) Right to Appeal
      (2) Board Composition
      (3) Consideration of Appeal
      (4) Petition for Administrative Review
5. Penalties
   a. Authorized Disciplinary Penalties
   b. Definition of Penalties
6. Parking and Traffic Regulations

1. **General Provisions**

   a. **Preamble**

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

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

   b. **Scope**

   (1) This code applies to individual students and states the function of student, faculty, and administrative staff members of the college in disciplinary proceedings.

   (2) The college has jurisdiction for disciplinary purposes over a person who was a student at the time he allegedly violated a Board policy, college regulation, or administrative rule.

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

   (1) "Class day" means a day on which classes before semester or summer session final examinations are regularly scheduled or on which semester or summer session final examinations are given;

   (2) "Vice President of Student Services" means the Vice President of Student Services, his delegate(s) or his representative(s);

   (3) "Director of Student Development" means the Director of Student Development, his delegate(s) or his representative(s);

   (4) "Director of Campus Security" means the Director of Campus Security, his delegate(s) or his representative(s);

   (5) "President" means the president of a college of the Dallas County Community College District;

   (6) "Student" means a person enrolled in a college of the Dallas County Community College District, or a person accepted for admission to the college.

   (7) All vice presidents, deans, associate deans, assistant deans, directors, and division chairmen of the college for the purposes of this code shall be called "administrators";

   (8) "Complaint" is a written summary of the essential facts constituting a violation of a Board policy, college regulation or administrative rule;

   (9) "Board" means the Board of Trustees, Dallas County Community College District;

   (10) "Chancellor" means the Chancellor of the Dallas County Community College District;

   (11) "Major violation" means one which can result in suspension or expulsion from the college or denial of degree;

   (12) "Minor violation" means one which can result in any disciplinary action other than suspension or expulsion from the college or denial of degree.

2. **Acquaintance with Policies, Rules, Regulations**

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

3. **Campus Regulations**

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

   (1) Not to violate any municipal, state, or federal laws, and

   (2) Not to interfere with or disrupt the orderly educational processes of any college of the Dallas County Community College District.

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

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

   (1) **Student Identification:**

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

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

   (2) **Use of District Facilites:** Each college of the Dallas County Community College District is a public facility entrusted to the Board of Trustees and college officials for the purpose of conducting the process of education. Activities which appear to be compatible with this purpose are approved through a procedure maintained in the Student Development Office.

   Activities which appear to be incompatible or in opposition to the purposes of education are normally disapproved. It is imperative that decision be made prior to an event in order to fulfill the trust of the public. No public facility could be turned over to the indiscriminate use of anyone for a platform or forum to promote random causes. These reasonable controls are exercised by college officials for the use of facilities to ensure the maximum use of the college for the purpose for which it was intended.

   Therefore, anyone planning an activity at one of the colleges of the Dallas County Community College District which requires space to handle two or more persons to conduct an activity must have prior approval. Application forms to reserve space must be acquired through the Student Development Office. This office also maintains a statement on procedures for reserving space.

   (3) **Speech and Advocacy:** Students have the right of free expression and advocacy; however, the time, place, and manner of exercising speech and advocacy shall be regulated in such a manner to ensure orderly conduct, non-interference with college functions or activities, and identification of sponsoring groups or individuals. Meetings must be registered with the Student Development Office. An activity may be called a meeting when the following conditions prevail at that activity:

   (a) When two or more persons are sitting, standing, or lounging so as to hear or see a presentation or discussion of a person or a group of persons.

   (b) When any special effort to recruit an audience has preceded the beginning of discussions or presentations.

   (c) When a person or group of persons appears to be conducting a systematic discussion or presentation on a definable topic.

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

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

   (a) Blocking or in any other way interfering with access to any facility of the college.

   (b) Inciting others to violence and/or participating in violent behavior, e.g., assault, loud or vulgar language spoken publicly, or any form of behavior acted out for the purpose of inciting and influencing others.

   (c) Holding rallies, demonstrations, or any other form of public gathering without prior approval of the college.

   (d) Conducting any activity which causes college officials to be drawn off their scheduled duties to intervene, supervise or observe the activity in the interest of maintaining order at the college.

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

* *

Education Code Section 4.30 provides:

(a) No person or group of persons acting in concert may willfully engage in disruptive activity or disrupt a lawful assembly on the campus or property of any private or public school or institution of higher education or public vocational and technical school or institute.

(b) For the purposes of this section, disruptive activity means:

(1) Obstructing or restraining the passage of persons in an exit, entrance, or hallway of any building without the authorization of the administration of the school;

(2) Seizing control of any building or portion of a building for the purpose of interfering with any administrative, educational, research, or other authorized activity;

(3) Preventing or attempting to prevent by force or violence or the threat of force or violence any lawful assembly authorized by the school administration;

(4) Disrupting by force or violence or the threat of force or violence a lawful assembly in progress; or

(5) Obstructing or restraining the passage of any person at an exit or entrance to said campus or property or preventing or attempting to prevent by force or violence or by threats thereof the ingress or egress of any person to or from said property or campus without the authorization of the administration of the school.

(c) For the purposes of this section, a lawful assembly is disrupted when any peson in attendance is rendered incapable of participating in the assembly due to the use of force or violence or due to a reasonable fear that force or violence is likely to occur.

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

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

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

* *

   (5) **Drinking of Alcoholic Beverages:** Each college of the Dallas County Community College District specifically forbids the drinking of or possession of alcoholic beverages on its campus.

   (6) **Drugs:** Each college of the Dallas County Community College District specifically forbids the illegal possession, use, sale or purchase of drugs, narcotics, or hallucinogens on or off campus.

   (7) **Gambling:** State law expressly forbids gambling of any kind on state property.

   (8) **Hazing:** Each college of the Dallas County College District, as a matter of principle and because it is a

violation of state law, is opposed to and will endeavor to prevent hazing activities which involve any of the following factors singly or in conjunction:

(a) Any actions which seriously imperil the physical well-being of any student (all walks and all calisthenics are held to be actions which seriously imperil the physical well-being of students and are, therefore, accordingly specifically prohibited).

(b) Activities which are by nature indecent, degrading, or morally offensive.

(c) Activities which by their nature may reasonably be assumed to have a degrading effect upon the mental or moral attitude of the persons participating therein.

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

(9) **Academic Dishonesty**

(a) The Vice President of Student Services may initiate disciplinary proceedings against a student accused of academic dishonesty.

(b) "Academic dishonesty" includes, but is not limited to, cheating on a test, plagiarism and collusion.

(c) "Cheating on a test" includes:

(i) Copying from another student's test paper;

(ii) Using, during a test, materials not authorized by the person giving the test;

(iii) Collaborating with another student during a test without authority;

(iv) Knowingly using, buying, selling, stealing, transporting or soliciting in whole or part the contents of an unadministered test;

(v) Substituting for another student, or permitting another student to substitute for one's self, to take a test; and

(vi) Bribing another person to obtain an unadministered test or information about an unadministered test.

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

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

(10) **Financial Transactions with the College**

(a) No student may refuse to pay or fail to pay debt he owes to the college.

(b) No student may give the college a check, draft or order with intent to defraud the college.

(c) A student's failure to pay the college the amount due on a check, draft, or order, on or before the fifth class after the day the business office sends written notice that the drawee has rightfully refused payment on the check, draft or order, is prima facie evidence that the student intended to defraud the college.

(d) The Vice President of Student Services may initiate disciplinary proceedings against a student who has allegedly violated the provisions of this section.

(11) **Other Offenses**

(a) The Vice President of Student Services may initiate disciplinary proceedings against a student who:

(i) Conducts himself in a manner that significantly interferes with college teaching, research, administration, disciplinary proceedings or other college activities, including its public service functions, or with other authorized activities on college premises;

(ii) Damages, defaces or destroys college property or property of a member of the college community or campus visitor;

(iii) Knowingly gives false information in response to requests from the college;

(iv) Engages in hazing, as defined by state law and college regulations;

(v) Forges, alters or misuses college documents, records or I.D. cards;

(vi) Violates college policies or regulations concerning parking, registration of student organizations, use of college facilities, or the time, place and manner of public expression;

(vii) Fails to comply with directions of college officials acting in the performance of their duties;

(viii) Conducts himself in a manner which adversely affects his suitability as a member of the academic community or endangers his own safety or the safety of others;

(ix) Illegally possesses, uses, sells, or purchases drugs, narcotics, hallucinogens, or alcoholic beverages on or off campus;

(x) Commits any act which is classified as an indictable offense under either state or federal law.

4. **Disciplinary Proceedings**

a. **Administrative Disposition**

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

(a) When the Vice President of Student Services' Office receives information that a student has allegedly violated a Board policy, college regulation, or administrative rule, the Vice President or a subordinate delegated by him shall investigate the alleged violation. After completing the preliminary investigation, the Vice President may:

(i) Dismiss the allegations as unfounded, either before or after conferring with the student; or

(ii) Proceed administratively and impose disciplinary action; or

(iii) Prepare a complaint based on the allegation for use in disciplinary hearings along with a list of witnesses and documentary evidence supporting the allegation.

(b) The President may take immediate interim disciplinary action, suspend the right of a student to be present on the campus and to attend classes, or otherwise alter the status of a student for violation of a Board policy, college regulation, or administrative rule, when in the opinion of such official the interest of the college would best be served by such action.

(c) No person shall search a student's personal possessions for the purpose of enforcing this code unless the individual's prior permission has been obtained. Searches by law enforcement officers of such possessions shall be only as authorized by law.

(2) **Summons**

(a) A student may be summoned to appear in connection with an alleged violation by sending him a letter by certified mail, return receipt requested, addressed to the student at his address appearing in the registrar's office records. It is the student's responsibility to immediately notify the registrar's office of any change of address.

(b) The letter shall direct the student to appear at a specified time and place not less than three class days after the date of the letter. The letter shall also describe briefly the alleged violation and shall state the Vice President of Student Services' intention to handle the allegation as a minor or major violation.

(c) The Vice President of Student Services may place on disciplinary probation a student who fails without good cause to comply with a letter of summons, or the Vice President may proceed against the student as stated below in the sections of **Disposition** and **Penalties.**

(3) **Disposition**

(a) At a conference with a student in connection with an alleged minor or major violation, the Vice President shall advise the student of his rights.

(b) A student may refuse administrative disposition of the alleged violation and, on refusal, is entitled to a hearing. If a student accepts administrative disposition, he shall sign a statement that he understands the nature of the charges, his right to a hearing or to waive the same, the penalty imposed, and his waiver of the right of appeal.

(c) The Vice President of Student Services shall prepare an accurate, written summary of each administrative disposition and forward a copy to the student (and, if the student is a minor, to the parent or guardian of the student), to the Director of Student Development and to the Director of Campus Security.

(d) The Vice President of Student Services may impose disciplinary action as follows:

(i) For minor violations, any action authorized by this code in the section on **Penalties** (from 1-8, i.e. Admonition through Suspension of eligibility).

(ii) For major violations, any action authorized by this code in the section on **Penalties** (from 1-11, i.e. Admonition through Expulsion).

b. **Student Discipline Committee**

(1) **Composition; Organization**

(a) When a student refuses administrative disposition of either a major or a minor violation, he is entitled to a hearing before the Student Discipline Committee. This request must be made in writing on or before the sixth working day following administrative disposition. The Committee shall be composed of **equal numbers of students, administrators and faculty** of the college. The committee shall be appointed by the President for each hearing on a rotating basis or on a basis of availability.

(b) The Student Discipline Committee shall elect a Chairman from the appointed members. The Chairman of the committee shall rule on the admissibility of evidence, motions, and objections to procedure, but a majority of the committee members may override the Chairman's ruling. All members of the Committee are eligible to vote in the hearing.

(c) **Chairman:** The Chairman shall set the date, time, and place for the hearing and may summon witnesses, and require the production of documentary and other evidence.

(d) The Vice President of Student Services shall represent the college before the Student Discipline Committee and present evidence to support any allegations of violations of Board policy, college regulation, or administrative rules. The Vice President of Student Services may be assisted by legal counsel when in the opinion of the Vice President of Student Services the best interests of the student or the college would be served by such assistance.

(2) **Notice**

(a) The Committee Chairman shall by letter notify the student concerned of the date, time and place for the hearing. The letter shall specify a hearing date not less than three (3) nor more than ten (10) class days after the date of the letter. If the student is under 18 years of age, a copy of the letter shall be sent to the parents or guardian.

(b) The Chairman may for good cause postpone the hearing so long as all interested parties are notified of the new hearing date, time and place.

(c) The Student Discipline Committee may hold a hearing at any time if the student has actual notice of the date, time, and place of the hearing, and consents in writing thereto, and the President, or his designated representative in his absence, states in writing to the committee that, because of extraordinary circumstances the requirements are inappropriate.

(d) The notice shall specify whether the charge or charges are considered minor violations or major violations; shall direct the student to appear before the committee on the date and at the time and place specified, and shall advise the student of the following rights:

(i) To a private hearing;

(ii) To appear alone or with legal counsel (if charges have been evaluated as a major violation or if the college is represented by legal counsel);

(iii) To have his parents or legal guardian present at the hearing;

(iv) To know the identity of each witness who will testify against him;

(v) To cause the committee to summon witnesses, require the production of documentary and other evidence possessed by the college, and to offer evidence and argue in his own behalf;

(vi) To cross-examine each witness who testifies against him;

(vii) To have a stenographer present at the hearing to make a stenographic transcript of the hearing, at the student's expense, but the student is not permitted to record the hearing by electronic means;

(viii) To appeal to the Faculty-Student Board of Review, subject to the limitations established by the **Faculty-Student Board of Review** section.

(e) The Vice President of Student Services may suspend a student who fails witout 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 upon request by one of the students-in-interest, separate hearings may be held.

(b) At least three (3) class days before the hearing date, the student concerned shall furnish the Committee Chairman with:

(i) The name of each witness he wants summoned and a description of all documentary and other evidence possessed

by the college which he wants produced;
(ii) An objection that, if sustained by the Chairman of the Student Discipline Committee, would prevent the hearing;
(iii) The name of legal counsel, if any, who appear with him;
(iv) A request for a separate hearing, if any, and the grounds for such a request.

(c) When the hearing is set under waiver of notice or for other good cause determined by the Committee Chairman, the student concerned is entitled to furnish the information described in paragraph (b) hereof at any time before the hearing begins.

(4) **Procedure**

(a) The hearing shall be informal and the Chairman shall provide reasonable opportunities for witnesses to be heard. The college may be represented by staff members of the Vice President of Student Services' office, legal counsel and other persons designated by the President. The hearing shall be open to the public so long as space is available, but may include the following persons on the invitation of the student:
(i) Representatives of the College Council;
(ii) A staff member of the College newspaper;
(iii) Representatives of the Faculty Association;
(iv) Student's legal counsel, and
(v) Members of the student's immediate family.

(b) The Committee shall proceed generally as follows during the hearing:
(i) The Vice President of Student Services shall read the complaint;
(ii) The Vice President of Student Services shall inform the student of his rights, as stated in the notice of hearing,
(iii) The Vice President of Student Services shall present the College's case;
(iv) The student may present his defense;
(v) The Vice President of Student Services and the student may present rebuttal evidence and argument;
(vi) The Committee will vote the issue of whether or not there has been a violation of Board policy, college regulation or administrative rule, if the Committee finds the student has violated a Board policy, college regulation or administrative rule, the Committee will determine an appropriate penalty.
(vii) The Committee 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 member and the student to be confidential. Committee members may freely question witnesses.

(b) The Committee shall presume a student innocent of the alleged violation until it is convinced by clear and convincing evidence that the student violated a Board policy, college regulation or administrative rule.

(c) All evidence shall be offered to the Committee during the hearing and made a part of the hearing record. Documentary evidence may be admitted in the form of copies of extracts, or by incorporation by reference. Real evidence may be photographed or described.

(d) A student defendant may not be compelled to testify against himself.

(6) **Record**

(a) The hearing record shall include; a copy of the notice of hearing; all documentary and other evidence offered or admitted in evidence; written motions, pleas, and any other materials considered by the Committee; and the Committee's decisions.

(b) If notice of appeal is timely given as hereinafter provided, the Vice President of Student Services, at the direction of the Committee Chairman, shall send the record to the Board of Review, with a copy to the student appellant on or before the tenth class day after the notice of appeal is given.

b. **Faculty-Student Board of Review**

(1) **Right to Appeal**

(a) In those cases in which the disciplinary penalty imposed was as prescribed in the section on **Penalties,** (6) Restitution through (11) Expulsion, the student may appeal the decision of the Student Discipline Committee, or the decision of the President in an interim action to the Faculty-Student Board of Review. Disciplinary actions taken under the section on Penalties, (1) Admonition through (5) Bar against readmission, cannot be appealed beyond the Student Discipline Committee. A student appeals by giving written notice to the Vice President of Student Services on or before the third class day after the day the decision or action is announced. This notice may be informal, but shall contain the student's name, the date of the decision or action, the name of his legal counsel, if any, and a simple request for appeal.

(b) Notice of appeal timely given suspends the imposition of penalty until the appeal is finally decided, but interim action may be taken as authorized under the section on **Disciplinary Disposition** which authorizes the President to take immediate interim disciplinary action.

(2) **Board Composition**

(a) The President shall appoint Boards of Review to hear appeals under this code. Each such Board shall have three faculty representatives and two students appointed by the President in alphabetical rotation from available members of the Review Panel.

(b) The Review Panel shall have twenty-five (25) members, selected as follows:
(i) Fifteen (15) representatives from the faculty, recommended by the President of the Faculty Association and appointed by the President of the college for three-year staggered terms.
(ii) Ten (10) students shall be appointed by the President of the college for one-year terms. Student members must have an overall 2.0 average on all college work attempted at the time of the nomination and must not have a discipline case pending.

(c) The President shall instruct the Board of Review members on student disciplinary policies, rules, and hearing procedures as soon as practicable after the members are appointed.

(3) **Consideration of Appeal**

(a) The Board of Review shall consder each appeal on the record of the Student Discipline Committee and for good cause shown, original evidence and newly discovered evidence may be presented.

(b) Upon timely appeal, the President shall select a Board of Review as aforesaid and shall notify the student appellant and the Vice President of Student Services in writing of the time, date, and place of the hearing as determined by the President.

(c) The President will designate one of the members of the Board of Review to serve as chairman.

(d) Appellate hearings will follow the procedure prescribed in this code.

(e) The Board of Review will hear oral argument and receive written briefs from the student appellant and Vice President of Student Services or their representatives.

(f) The Board of Review, after considering the appeal, may affirm the Student Discipline Committee's decision, reduce the penalty determined or otherwise modify the decision of the Student Discipline Committee, or dismiss the complaint.

(g) The Board of Review shall modify or set aside the finding of violation, penalty or both, if the substantive rights of the student were prejudiced because the Student Discipline Committee's finding of facts, conclusions or decisions were:
(i) In violation of a federal or state law, Board policy, college regulation, administrative rule, or authorized procedure;
(ii) Clearly erroneous in view of the reliable probative and substantial evidence on the complete hearing; or
(iii) Capricious, or characterized by abuse of discretion or clearly unwarranted exercise of discretion

(h) The Board of Review may not increase a penalty assessed by the Student Discipline Committee.

(4) **Petition for Administrative Review**

(a) A student is entitled to appeal in writing to the Board of Trustees through the President, the Chancellor, and the Chairman of the Board. The President shall automatically review every penalty of expulsion.

(b) A petition for review is informal but shall contain, in addition to the information required, notice of appeal, the date of the Board of Review's action on the student's appeal and his reasons for disagreeing with the Board's action. A student shall file his petition with the President on or before the third class day after the day the Board of Review announces its action on the appeal. If the President rejects the petition, and the student appellant wishes to petition the Chancellor, he shall file the petition with the Chancellor on or before the third class day after the President rejects the petition in writing.

(c) The President, the Chancellor, and the Board of Trustees in their review may take any action that the Student Discipline Committee is authorized to take. They may receive written briefs and hear oral argument during their review.

4. **Penalties**

a. **Authorized Disciplinary Penalties:** The Vice President of Student Services, the Student Discipline Committee, or the Faculty-Student Board of Review may impose one or more of the following penalties for violation of a Board policy, college regulation, or administrative rule:
(1) Admonition
(2) Warning probation
(3) Disciplinary probation
(4) Withholding of transcript or degree
(5) Bar against readmission
(6) Restitution
(7) Suspension of rights or privileges
(8) Suspension of eligibility for official athletic and non-athletic extracurricular activities
(9) Denial of degree
(10) Suspension from the college
(11) Expulsion from the college

b **Definitions:** The following definitions apply to the penalties provided above:

(1) An "Admonition" is a written reprimand from the Vice President of Student Services to the student on whom it is imposed.

(2) "Warning probation" indicates that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires.

(3) "Disciplinary probation" indicates that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires. Students will be placed on disciplinary probation for engagin 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 of degree" is imposed upon a student who fails to pay a debt owed the college or who has a disciplinary case pending final disposition. The penalty terminates on payment of the debt or final disposition of the case.

(5) "Bar against readmission" is imposed on a student who has left the college on enforced withdrawal for disciplinary reasons.

(6) "Restitution" is reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.

(7) "Disciplinary suspension" may be either or both of the following:
(a) "Suspension of rights and privileges" is an elastic penalty which may impose limitations or restrictions to fit the particular case.
(b) "Suspension of eligibility for official athletic and non-athletic extracurricular activities" prohibits, during the period of suspension, the student on whom it is imposed from joining a registered student organization, taking part in a registered student organization's activities, or attending its meetings or functions; and from participating in an official athletic or non-athletic extracurricular activity. Such suspension may be imposed for any length of time up to one calendar year. Students will be placed on disciplinary suspension for engaging in activities such as the following: having intoxicating beverages in any college facility; destroying state property or student's personal property; giving false information in response to requests from the college; instigating a disturbance or riot; stealing; possession, use, sale or purchase of illegal drugs on or off campus; any attempt at bodily harm, which includes taking an overdose of pills or any other act where emergency medical attention is required; and conviction of any act which is classified as a misdemeanor or felony under state or federal law.

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

(9) "Suspension from the College" prohibits, during the period of suspension, the student on whom it is imposed from being initiated into an honorary or service organization; from entering the college campus except in response to an official summons; and from registering, either for credit or for non-credit, for scholastic work at or through the college.

(10) "Expulsion" is permanent severance from the college. This policy shall apply uniformly to all of the colleges of the Dallas County Community College District.

In the event any portion of this policy conflicts with the state law of Texas, the state law shall be followed.

6. Parking and Traffic

(a) Reserved Parking Areas

These reserved areas ae designated by signs; all other parking areas are open and are non-reserved.

(1) Handicapped persons, College visitors

(2) Motorcycles

(b) Tow Away Areas

(1) Handicapped persons area

(2) Fire Lanes

(3) Parking or driving on campus in areas other than those designated for vehicular traffic

(4) Parking in "No Parking" zone

(5) Parking on courtyards

(c) General Information

(1) College parking areas are regulated by state, municipal and campus statutes. College campus officers are commissioned to cite violators.

(2) All vehicles which park on the campus of the College must bear a parking decal emblem. The parking decal may be secured from the College Security Division or during fall and spring registration periods. No fee is charged for the decal.

(3) Placement of decal emblem:

(a) Cars: Lower left corner of rear bumper.

(b) Motorcycles, Motor Bikes, etc., Gas tank

(4) Campus Speed Limits*

(a) 10 M.P.H. in parking areas

(b) 20 M.P.H. elsewhere on campus.

*Unless otherwise posted.

(5) All handicapped parking must be authorized and handicapped decal displayed on vehicle prior to parking in handicapped reserved areas.

(d) Campus Parking and Driving Regulations

(1) The Colleges, acting by and through their Board of Trustees are authorized by state law to promulgate, adopt and enforce campus parking and driving regulations. Campus officers are commissioned police officers, and as such, all traffic and criminal violations are within their jurisdiction.

(2) The College has authority for the issuance and use of suitable vehicle identification insignia as permits to park and drive on campus. Permits may be suspended for the violation of campus parking and driving regulations.

(3) The College campus officers have the authority to issue the traffic tickets and summons of type now used by the Texas Highway Patrol. It is the general policy to issue these tickets for violations by visitors and persons holding no College permit. These tickets are returnable to the Justice of Peace Court in which the college is located. Furthermore the campus officers are authorized to issue campus citations which are returnable to the Department of Safety and Security at the Business Office.

(4) Under the direction of the College President, the Department of Safety and Security shall post proper traffic and parking signs.

(5) Each student shall file an application for a parking permit with the Security Office upon forms prescribed by the College.

(6) These traffic regulations apply not only to automobiles but to motor bikes, motorcycles and ordinary bicycles.

(e) Procedures

(1) All motor vehicles must be parked in the parking lots between the parking lines. Parking in all other areas, such as campus drives, curb areas, courtyards, and loading zones, will be cited.

(2) Citations may be issued for:

(a) Speeding (the campus speed limit is 20 M.P.H. except where posted)

(b) Reckless driving

(c) Double parking

(d) Driving wrong way in one-way lane

(e) Parking in "No Parking" lane

(f) Improper parking (parts of car outside the limits of a parking space).

(g) Parking in wrong area (for exmple, handicapped or "No Parking" areas)

(h) Parking trailers or boats on campus

(i) Parking or driving on campus in areas other than those designated for vehicular traffic

(j) Violations of all state statues regulating vehicular traffic.

(k) Failure to display parking permit

(l) Collision with another vehicle or any sign or immovable object

(3) A citation is notice that a student's parking permit has been suspended. The service charge to reinstate the parking and driving permit must be paid at the Business Office. Failure to pay the service charge will result in the impoundment of a vehicle that is parked on campus and whose decal has been suspended.

(4) A person who receives a campus citation shall have the right within ten days to appeal in writing to the Vice President of Business, accompanied by whatever reason the person feels that the citation should not have been issued.

(5) If it becomes necessary to remove an improperly parked vehicle, an independent wrecker operator may be called. The owner of the vehicle will be charged the wrecker fee in addition to the service charge for reinstatement of driving and parking privileges.

(6) Visitors to campus are also required to follow College regulations.

(7) The service charge for reinstatement of the parking and driving permit will be $5.00 per citation.

(8) Four citations per car during an academic year will result in permanent suspension of parking and driving permit for the balance of that academic year. A new total commences on August 1 of each year.

(9) The College is not responsible for the theft of vehicles on campus or their contents.

Course Descriptions

Course Descriptions

The following terms are used throughout the catalog and particularly in this section of Course Descriptions. A brief explanation follows each term.

1. *Concurrent Enrollment* - (a) Enrollment by the same student in two different colleges of the District at the same time, or (b) enrollment by a high school senior in a high school and one of the District colleges at the same time, or (c) enrollment by a student in two related courses in the same semester.
2. *Contact Hours* - The number of clock hours a student spends in a given course during the semester.
3. *Credit Hours* (Cr.) - College work is measured in units called credit hours. A credit hour value is assigned to each course and is normally equal to the number of hours the course meets each week. Credit hours are sometimes referred to as semester hours.
4. *Elective* - A course chosen by the student that is not required for a certificate or degree.
5. *Flexible Entry Course* - A course that permits beginning or ending dates other than the beginning or ending of the semester. Consult the class schedule for further information.
6. *Laboratory Hours* (Lab.) - The number of clock hours in the fall or spring semester the student spends each week in the laboratory or other learning environment.
7. *Lecture Hours* (Lec.) - The number of clock hours in the fall or spring semester the student spends each week in the classroom.
8. *Major* - The student's main emphasis of study (for example, Automotive Technology, Psychology, etc.)
9. *Performance Grades* - Grades assigned point values, including A, B, C, D, and F.
10. *Prerequisite* - A course that must be successfully completed or a requirement such as related life experiences that must be met before enrolling in another course.

In the following course descriptions, the number of credit hours for each course is indicated in parenthesis opposite the course number and title. Courses numbered 100 (except Music 199, Art 199 and Theater 199) or above may be applied to requirements for associate degrees. Courses numbered below 100 are developmental in nature and may not be applied to degree requirements. Students are urged to consult their counselors or specific college catalogs for information about transferability of courses to four-year institutions. Course prerequisites may only be waived by the appropriate division chairperson.

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 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 I (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) 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) 702 (2)
(See Cooperative Work Experience)
ACCOUNTING (ACC) 713, 803, 813 (3)
(See Cooperative Work Experience)

AIR CONDITIONING AND REFRIGERATION (ACR) 111 (3)
PRINCIPLES OF REFRIGERATION (2 LEC., 2 LAB.)

This course introduces the principles of refrigeration. Topics include terminology, heat and energy concepts, basic system components and operating characteristics, and installation procedures. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 112 (3)
PROPERTIES OF AIR (2 LEC., 2 LAB.)

Prerequisites: Air Conditioning and Refrigeration 111 and Mathematics 195. The thermodynamic properties of air are studied. Theories are applied to evaporative cooling, ventilation, humidity control, environmental conditions affecting human comfort, and health and industrial processes. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 113 (3)
FUNDAMENTALS OF ELECTRICITY (2 LEC., 3 LAB.)

Starting with basic wiring, wiring diagrams and symbols, this course includes electrical concepts of electron flow, resistance, voltage, current, power, and the construction and use of meters. The relation of electrical components to diagrams and applications to control circuits are emphasized. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 114 (3)
HEAT LOAD ANALYSIS (2 LEC., 2 LAB.)

Prerequisites: Air Conditioning and Refrigeration 111 and Mathematics 195. This course covers the methods and procedures of heating and cooling surveys for residences and small commercial systems. Included are ways to reduce equipment load for energy conservation and operating cost efficiency. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 115 (3)
UNIT AIR CONDITIONING SYSTEMS (2 LEC., 3 LAB.)

Prerequisites: Completion or enrollment in Air Conditioning and Refrigeration 111 and 113. The servicing of domestic unit air conditioning systems is presented. Refrigerant charging and evacuation procedures, electric motors and controls, and functional operations of major components are studied. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 116 (3)
SUMMER AIR CONDITIONING SYSTEMS (2 LEC., 3 LAB.)

Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 112, 114, and 115. Central residential and small commercial systems are studied. Topics include equipment, electric power distribution, and controls. Installation, operation, and troubleshooting are emphasized. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 117 (3)
DOMESTIC REFRIGERATION (2 LEC., 2 LAB.)

Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 111 and 113. This course presents the mechanical and electrical elements of refrigeration. Theories are applied to domestic refrigerators, freezers, and automatic ice cube makers. Emphasis is on operation, troubleshooting, and repair. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 118 (3)
WINTER AIR CONDITIONING SYSTEMS (2 LEC., 3 LAB.)

Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 113, 114, and 115. Direct gas fired and electric warm air heating systems are studied. Topics include humidification devices, specific equipment, wiring, and controls. Installation and service are emphasized. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 221 (3)
REFRIGERATION LOADS (2 LEC., 2 LAB.)

Prerequisites: Air Conditioning and Refrigeration 116. This course focuses on the analysis and estimation of refrigeration loads for medium and low temperature systems. Product storage data and procedures for calculating loads with a variety of products and refrigeration equipment are included. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 222 (3)
ADVANCED SYSTEMS (2 LEC., 3 LAB.)

Prerequisites: Air Conditioning and Refrigeration 116. Large commercial and industrial air conditioning systems are introduced. Basic system designs, equipment and control systems are the main topics. Instruction on air handling units, air volume boxes, centrifugal chillers, absorption systems, cooling towers, water treatment, and chilled water systems is included. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 223 (3)
MEDIUM TEMPERATURE REFRIGERATION SYSTEMS (2 LEC., 3 LAB.)

Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 221. Service and installation procedures for medium temperature equipment as found in food stores, warehouses, distribution centers, and processing plants are presented. Particular attention is given to electrical and mechanical features and to defrost subsystems. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 224 (3)
SYSTEM TESTING AND BALANCING (2 LEC., 2 LAB.)

Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 222. Concepts and procedures for determining the effectiveness and efficiency of an air conditioning system are studied. System balance, capacity, load requirements and energy consumption are considered. Also included are the performance data and the use of test instruments for measurement of air flow, water flow, energy consumption, and recording of temperature. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 227 (3)
LOW TEMPERATURE REFRIGERATION SYSTEMS (2 LEC., 3 LAB.)

Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 221. Service and installation procedures for low temperature equipment as found in food stores, warehouses, distribution centers, and industrial plants are presented. Particular attention is given to electrical and mechanical characteristics and to defrost system requirements. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 228 (3)
AIR CONDITIONING SYSTEM EQUIPMENT SELECTION (2 LEC., 3 LAB.)

Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 222. Methods of equipment selection are covered for air conditioning load requirements. Consideration is given to system layout, utility service, control schemes, duct sizing, and installation practices. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 229 (3)
REFRIGERATION EQUIPMENT SELECTION (2 LEC., 2 LAB.)

Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 223 or 227. This course presents a procedure for selecting equipment and estimating the capacity of commercial refrigeration systems. Consideration is given to component compatibility, system continuity control, balancing, and efficiency. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 230 (3)
ENERGY CONSERVATION (2 LEC., 2 LAB.)

Prerequisite: Air Conditioning and Refrigeration 116. The flow of energy in an air conditioning or refrigeration system is examined in depth. Emphasis is on cost effectiveness and energy savings. Practical situations are examined where industry offers a range of equipment or construction designs using various sources of energy with different degrees of efficiency. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 802, 812 (2)
(See Cooperative Work Experience)

AIR CONDITIONING AND REFRIGERATION (ACR) 803, 813 (3)
(See Cooperative Work Experience)

AIR CONDITIONING AND REFRIGERATION (ACR) 804, 814 (4)
(See Cooperative Work Experience)

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) 104 (3)
AMERICAN INDIAN CULTURE (3 LEC.)

Native Americans are studied from three perspectives: Native American history and prehistory; traditional Indian cultures; and native Americans today. The latter theme stresses current topics such as discrimination, poverty, employment, reservations, The Bureau of Indian Affairs, self-determination, health care, etc.

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.

ANTHROPOLOGY (ANT) 208 (3)
MULTICULTURAL STUDIES (3 LEC.)

Prerequisite: Anthropology 101 or consent of instructor. This course is a multicultural approach to the study of modern Texas. Emphasis is on African, Anglo and Hispanic cultures. Field experiences and interviews are interspersed with lecture to provide opportunities for personal contact with various cultural behaviors.

ANTHROPOLOGY (ANT) 210 (3)
LANGUAGE, CULTURE AND PERSONALITY (3 LEC.)

Prerequisite: Anthropology 101 or consent of instructor. Interrelated aspects of language, culture and personality are presented. Special consideration is given to intellectual, social and behavioral problems characteristic of multilingual, multicultural societies.

ANTHROPOLOGY (ANT) 231 (3)
INTRODUCTION TO ARCHEOLOGY (3 LEC.)

This course is an anthropological approach to archeology. Topics include an introduction to the study of humanity's past. How archeologists retrieve, process, analyze and interpret surviving prehistoric materials is covered, as well as a survey of world prehistory through neolithic times.

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) 119 (3)
CREATIVE PHOTOGRAPHY FOR THE ARTIST II (2 LEC., 4 LAB.)

Prerequisite: Art 118 or the consent of the instructor. This course is a continuation of Art 118. Emphasis is on individual expression. 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) 203 (3)
ART HISTORY (3 LEC.)

Prerequisites: Art 105 and Art 106. The development of the art of western culture during the Renaissance Period is presented. Emphasis is on the development of Renaissance art in Northern and Southern Europe.

ART (ART) 204 (3)
ART HISTORY (3 LEC.)

Prerequisites: Art 105 and Art 106. The development of the art of western culture from the late 19th century through today is presented. Emphasis is on the development of modern art in Europe and America.

ART (ART) 205 (3)
PAINTING I (2 LEC., 4 LAB.)

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

ART (ART) 206 (3)
PAINTING II (2 LEC., 4 LAB.)

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

ART (ART) 208 (3)
SCULPTURE I (2 LEC., 4 LAB)

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

ART (ART) 209 (3)
SCULPTURE II (2 LEC., 4 LAB)

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

ART (ART) 215 (3)
CERAMICS I (2 LEC., 4 LAB)

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

ART (ART) 216 (3)
CERAMICS II (2 LEC., 4 LAB.)

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

ART (ART) 220 (3)
PRINTMAKING I (2 LEC., 4 LAB)

Prerequisites: Art 110, Art 111, Art 115, or the consent of the instructor. Basic printmaking processes are introduced. Included are planographic, intaglio, stencil and relief processes. Laboratory fee.

ART (ART) 222 (3)
PRINTMAKING II (2 LEC., 4 LAB.)

Prerequisite: Art 220. This course is a continuation of Printmaking I. Laboratory fee.

ART (ART) 228 (3)
THREE-DIMENSIONAL DESIGN (2 LEC., 4 LAB.)

Prerequisite: Art majors: Art 110, 111, 114. Drafting Technology majors: Drafting 183, Engineering 186. Development of three-dimensional projects in metal, plastic, and wood through the stages of design: idea, sketches, research, working drawing, model and finished product. Emphasis is on function, material and esthetic form. 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.

ASTRONOMY (AST) 103 (1)
ASTRONOMY LABORATORY I (3 LAB.)

Prerequisite: Credit or concurrent enrollment in Astronomy 101. The student uses simple equipment to make elementary astronomical obervations of the motions of celestial objects. Also covered are elementary navigational techniques, graphical techniques of calculating the position of a planet or comet, and construction of simple observing equipment. This course includes night observations. Laboratory fee.

ASTRONOMY (AST) 104 (1)
ASTRONOMY LABORATORY II (3 LAB.)

Prerequisite: Credit or concurrent enrollment in Astronomy 102. The student makes and uses elementary astronomical observations. Topics include timekeeping, the various uses of spectra, and the motions of stars and galaxies. This laboratory includes night observations. Laboratory fee.

AUTO BODY (AB) 111 (3)
BASIC METAL PRINCIPLES (90 CONTACT HOURS)

Prerequisite: Concurrent enrollment in Auto Body 112. The use of hand and air tools is covered. Filling of plastic is included. Preparing the metal, sanding, masking, and priming surfaces on minor damages are emphasized. Laboratory fee.

AUTO BODY (AB) 112 (2)
APPLIED BASIC METAL PRINCIPLES (60 CONTACT HOURS)

Prerequisite: Concurrent enrollment in Auto Body 111. This course emphasizes hands-on use of hand and air tools used in metal repair. Techniques covered in Auto Body 111 will be applied to minor repair. Laboratory fee.

AUTO BODY (AB) 113 (3)
MINOR METAL REPAIR (90 CONTACT HOURS)

Prerequisite: Concurrent enrollment in Auto Body 114. Body construction and sheet metal alignment are studied. Emphasis is on the various techniques of applying plastic to minor damages. Laboratory fee.

AUTO BODY (AB) 114 (2)
APPLIED MINOR METAL REPAIR (60 CONTACT HOURS)

Prerequisite: Concurrent enrollment in Auto Body 113. This course emphasizes the hands-on techniques used in sheet metal alignment and damage correction. Procedures and tools covered in Auto Body 113 will be covered. Laboratory fee.

AUTO BODY (AB) 121 (3)
BASIC PAINT PRINCIPLES (90 CONTACT HOURS(

Prerequisite: Concurrent enrollment in Auto Body 122. This course presents the use of sanders and other equipment. Sanding and applying primer and paint are stressed. The use and operation of the spray gun are covered. Laboratory fee.

AUTO BODY (AB) 122 (2)
APPLIED BASIC PAINT PRINCIPLES (60 CONTACT HOURS)

Prerequisite: Concurrent enrollment in Auto Body 121. This course will cover hands-on techniques in the use of power and hand sanding as well as use of the spray gun. The techniques covered in Auto Body 121 will be covered. Laboratory fee.

AUTO BODY (AB) 123 (3)
PAINT BLENDING AND SPOT REPAIR TECHNIQUES (90 CONTACT HOURS)

Prerequisite: Concurrent enrollment in Auto Body 124. The use of manufacturers' codes, mass and tint tone methods, and color selection are examined. Initial color matching, correction, and color tinting are covered. Spray gun maintenance, operation, patterns and corrective adjustments receive particular attention. Polishing, touch-up, and detailing procedures are studied. Topics include the use of rubbing compounds, polishes, and buffing techniques. Minor surface repairs are also included. Laboratory fee.

AUTO BODY (AB) 124 (2)
APPLIED BLENDING AND SPOT REPAIR TECHNIQUES (60 CONTACT HOURS)

Prerequisite: Concurrent enrollment in Auto Body 123. This course examines potential problems that occur in the application of the finish on today's automobile. Recognition, prevention, and correction of problems are stressed. Laboratory fee.

AUTO BODY (AB) 139 (3)
BODY SHOP OPERATIONS (48 CONTACT HOURS)

The basic business principles of

managing an automobile service shop are studied. Emphasis is on management functions, financial analysis, and governmental regulations.

AUTO BODY (AB) 211 (3)
MAJOR PANEL REPLACEMENT (90 CONTACT HOURS)
Prerequisite: Concurrent enrollment in Auto Body 212. The use of power tools and cutting tools is presented. Emphasis is on the repair and replacement of panels. Laboratory fee.

AUTO BODY (AB) 212 (2)
APPLIED MAJOR PANEL REPLACEMENT (60 CONTACT HOURS)
Prerequisite: Concurrent enrollment in Auto Body 211. This course emphasizes repair and replacement of panels on in-service automobiles. The adjustment, repair and replacement of equipment and minor electrical apparatus are also covered. Laboratory fee.

AUTO BODY (AB) 213 (3)
MAJOR COLLISION AND FRAME REPAIR (90 CONTACT HOURS)
Students learn to use power frame alignment equipment through lecture, demonstration, and actual job repairs. Laboratory fee.

AUTO BODY (AB) 221 (3)
ADVANCED PAINT TECHNIQUES (90 CONTACT HOURS)
Prerequisite: Concurrent enrollment in Auto Body 222. This course focuses on the development of painting skills. Emphasis is on mixing colors, matching colors, and texture. Special decorative effects are also covered, such as simulated wood and vinyl application. Transfer repair, renewal, removal, film application, painting and taping techniques are included. Laboratory fee.

AUTO BODY (AB) 222 (2)
APPLIED ADVANCED PAINT TECHNIQUES (60 CONTACT HOURS)
Prerequisite: Concurrent enrollment in Auto Body 221. This course further develops painting skills with hands-on training, emphasizing mixing colors and matching color and texture of paint on in-service automobiles. Laboratory fee.

AUTO BODY (AB) 235 (3)
ESTIMATING (3 LEC.)
The procedures of estimating damage on automobiles are presented.

AUTO BODY (AB) 803 (3)
(See Cooperative Work Experience)

AUTO BODY (AB) 804 (4)
(See Cooperative Work Experience)

AUTOMOTIVE TECHNOLOGY (AT) 108 (4)
MINOR VEHICLE SERVICES (120 CONTACT HOURS)
This course introduces shop operations, customer relations, flat rate manuals, service manuals, safety, organizational design, pay structure, equipment, tools and basic operational theories. Also included are service procedures for lubrication, batteries, the cooling system, wheels and tires and new car pre-delivery service. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 110 (4)
ENGINE REPAIR I (120 CONTACT HOURS)
The operational theory of the internal combustion engine is studied. Engine rebuilding, mechanical diagnosis and failure analysis are introduced. Emphasis is on the proper use of hand tools, measuring instruments and equipment. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 112 (4)
ENGINE REPAIR II (120 CONTACT HOURS)
Prerequisite: Credit or concurrent enrollment in Automotive Technology 110. This course is a continuation of Engine Repair I. Engine rebuilding is continued with emphasis on in-service automobile repair. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 114 (4)
ENGINE ANALYSIS AND TUNE UP (120 CONTACT HOURS)
Techniques for diagnosing the automobile engine and other areas are covered. Electronics and conventional ignition systems are stressed. Carburetion and fuel injection systems are introduced. Complete tune-up procedures, using the latest test equipment are studied to insure the proper application to the automobile. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 116 (4)
FUEL AND EMISSION SYSTEMS (120 CONTACT HOURS)
This course covers the principles and functions of the automotive fuel system including the carburetor, fuel pump, gas tank and emission control systems. Diagnosis and repair and adjustment of emission control systems, repair and adjustment of the carburetor, fuel injection and their components are stressed. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 118 (4)
ELECTRICAL SYSTEMS (120 CONTACT HOURS)
This course covers the automobile electrical system, including batteries, wiring, lighting, alternators, generators, starters and voltage regulators. The use of electrical test equipment and schematics are covered. The proper care and use of tools is stressed. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 221 (4)
HEATING AND AIR CONDITIONING SYSTEMS (120 CONTACT HOURS)
This course focuses on the principles of operation and service techniques applied to automobile and air conditioning systems. Topics include components, testing, diagnosing charging and repair practices. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 223 (4)
BRAKE SYSTEMS (120 CONTACT HOURS)
This course covers diagnosis and repair of both drum and disc brake systems, power brake boosters, master cylinders, wheel cylinders and related component parts. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 225 (4)
FRONT END SYSTEMS (120 CONTACT HOURS)
This course will cover the proper techniques and procedures for complete front-end service, wheel alignment, replacement of worn parts, balancing wheels and related front-end and steering mechanisms. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 227 (4)
STANDARD TRANSMISSION AND DRIVE TRAINS (120 CONTACT HOURS)
This course includes the operating principles, construction, and maintenance of the manual transmission and related drive-train components. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 229 (4)
AUTOMATIC TRANSMISSIONS I (120 CONTACT HOURS)
The theory, operation and diagnosis of automatic transmissions are studied. Rebuilding of automatic transmission is introduced. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 231 (4)
AUTOMATIC TRANSMISSIONS II (120 CONTACT HOURS)
Prerequisite: Credit or concurrent enrollment in Automotive Technology 229. This course is a continuation of Automatic Transmissions I. Transmission rebuilding is continued with emphasis on in-service automobile repair. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 803, 813 (3)
(See Cooperative Work Experience)

AUTOMOTIVE TECHNOLOGY
(See Cooperative Work Experience)
704, 804 (4) BHC
713, 813 (3) BHC, CVC
714, 814 (4) BHC, CVC
803, 813 (3) BHC, EFC

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) 110 (4)
INTRODUCTORY BOTANY (3 LEC., 3 LAB.)

This course introduces plant form and function. Topics ranging from the cell through organs are included. Emphasis is on the vascular plants, including the taxonomy and life cycles of major plant divisions. Laboratory fee.

BIOLOGY (BIO) 115 (4)
BIOLOGICAL SCIENCE (3 LEC., 3 LAB.)

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

BIOLOGY (BIO) 116 (4)
BIOLOGICAL SCIENCE (3 LEC., 3 LAB.)

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

BIOLOGY (BIO) 120 (4)
INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY (3 LEC., 3 LAB.)

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

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

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

BIOLOGY (BIO) 123 (4)
APPLIED ANATOMY AND PHYSIOLOGY (3 LEC., 2 LAB.)

This course surveys human anatomy and physiology. The various body systems are studied and examined. This course is suggested for students of the health occupations in accordance with their program requirements. It is open to other students. This course will apply toward meeting the science requirement for non-science majors. No previous science background is presumed. Laboratory fee.

BIOLOGY (BIO) 211 (4)
INVERTEBRATE ZOOLOGY (3 LEC., 3 LAB.)

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

BIOLOGY (BIO) 216 (4)
GENERAL MICROBIOLOGY (3 LEC., 4 LAB.)

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) 217 (4)
FIELD BIOLOGY (3 LEC., 4 LAB.)

Prerequisite: Eight hours of biological science or the consent of the division chairperson. Local plant and animal life are surveyed in relationship to the environment. Aquatic and terrestrial communities are studied with reference to basic ecological principles and techniques. Emphasis is upon classification, identification, and collection of specimens in the field. This course may be repeated for credit.

BIOLOGY (BIO) 221 (4)
ANATOMY AND PHYSIOLOGY I (3 LEC., 3 LAB.)

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

BIOLOGY (BIO) 222 (4)
ANATOMY AND PHYSIOLOGY II (3 LEC., 3 LAB.)

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

BIOLOGY (BIO) 224 (4)
ENVIRONMENTAL BIOLOGY (3 LEC., 3 LAB.)

Prerequisite: 6 hours of biology. The principles of aquatic and terrestial communities are presented. Emphasis is on the relationship of these principles to the problems facing people in a modern technological society. Laboratory fee.

BIOLOGY (BIO) 235 (4)
COMPARATIVE ANATOMY OF THE VERTEBRATES (3 LEC., 4 LAB.)

Prerequisites: Biology 101 and 102. For science majors and pre-medical and pre-dental students. Major groups of vertebrate class is studied. Emphasis is on morphology and evolutionary relationships. Laboratory fee.

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.

CHEMISTRY (CHM) 101 (4)
GENERAL CHEMISTRY (3 LEC., 3 LAB.)

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

CHEMISTRY (CHM) 102 (4)
GENERAL CHEMISTRY (3 LEC., 3 LAB)

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

CHEMISTRY (CHM) 115 (4)
CHEMICAL SCIENCES (3 LEC., 3 LAB.)

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

CHEMISTRY (CHM)116 (4)
CHEMICAL SCIENCES (3 LEC., 3 LAB.)

Prerequisite: Chemistry 115 or the consent of the instructor. This course is for non-science majors. It covers organic chemistry and biochemistry. The important classes of organic compounds are surveyed. The concept of structure is the central theme. Biochemistry topics include carbohydrates, proteins, lipids, chemistry of heredity, disease and therapy, and plant biochemistry. Laboratory fee.

CHEMISTRY (CHM) 201 (4)
ORGANIC CHEMISTRY I (3 LEC., 4 LAB.)

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

CHEMISTRY (CHM) 202 (4)
ORGANIC CHEMISTRY II (3 LEC., 4 LAB.)

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

CHILD DEVELOPMENT (CD) 127 (3)
EARLY CHILDHOOD DEVELOPMENT, 5-12 YEARS (3 LEC.)

This course covers the principles of normal child growth and development from five through twelve years of age. Emphasis is on physical, intellectual, emotional, and social growth. Special attention is given to before and after school care.

CHILD DEVELOPMENT (CD) 135 (4)
INTRODUCTION TO EARLY CHILDHOOD PROGRAMS AND SERVICES (3 LEC., 2 LAB)

This course is a study of historical and current early childhood development programs and services, as well as individuals influencing these programs. Laws and standards regulating these child-care facilities are covered. The laboratory experience includes observation of and participation with pre-schools and child-care centers in the community.

CHILD DEVELOPMENT (CD) 137 (4)
EARLY CHILDHOOD LEARNING ENVIRONMENTS, ACTIVITIES AND MATERIALS (3 LEC., 2 LAB.)

This course is a study of appropriate learning experiences for young children in child-care facilities. Emphasis is on quality environments, learning activities, materials and effective teaching techniques. The laboratory experience includes observation and participation in the Parent/Child Study Center and community child-care facilities.

CHILD DEVELOPMENT (CD) 140 (3)
EARLY CHILDHOOD DEVELOPMENT, 0-3 YEARS (3 LEC.)

This course covers the principles of normal child growth and development from conception through three years. Emphasis is on physical, intellectual, emotional, and social growth.

CHILD DEVELOPMENT (CD) 141 (3)
EARLY CHILDHOOD DEVELOPMENT, 3-5 YEARS (3 LEC.)

This course covers the principles of normal child growth and development from three through five years of age. Emphasis is on physical, intellectual, emotional, and social growth.

CHILD DEVELOPMENT (CD) 200 (1)
APPLICATION OF LEARNING THEORIES (30 CONTACT HOURS)

This course provides application of child development learning theories with young children at the Parent/Child Study Center and other appropriate child-care facilities. It is repeated four times concurrently with required Child Development core or elective courses.

CHILD DEVELOPMENT (CD) 203 (3)
PARENTS AND THE CHILD - CAREGIVER/TEACHER (3 LEC.)

Relationships between caregivers, teacher and parents of young children are studied. Emphasis is on ways to develop parental involvment in child care facilities. The course includes observation and participation with teachers, parents, and young children in group settings.

CHILD DEVELOPMENT (CD) 209 (3)
EARLY CHILDHOOD DEVELOPMENT SPECIAL PROJECTS (3 LEC.)

Registration for this course must be preceded by an interview with a child development instructor. A particular dimension of child care is explored in depth by the student in an individual project. Participation in a designated child care center or facility directly related to the student's special project is included.

CHILD DEVELOPMENT (CD) 233 (4)
DIRECTED PARTICIPATION OF EARLY CHILDHOOD PROGRAMS (2 LEC., 5 LAB)

This course provides in-depth observation and participation experiences and activities with young children at the Parent/Child Study Center and other appropriate child-care facilities.

CHILD DEVELOPMENT (CD) 236 (3)
THE SPECIAL CHILD: GROWTH AND DEVELOPMENT (3 LEC.)

Children with special needs are studied with emphasis on physical, mental, and emotional/behavioral problems. This course provides a

broad overview of these problem areas and serves as an introduction to the study of exceptional children.

CHILD DEVELOPMENT (CD) 238 (3)
INTRODUCTION TO ADMINISTRATION OF CHILD CARE PROGRAMS (3 LEC.)
The management of preschool/day care centers is studied. Topics include budgeting, record-keeping, food, health and referral services, and personnel practices.

CHILD DEVELOPMENT (CD) 239 (3)
STUDIES IN CHILD GUIDANCE (2 LEC., 2 LAB.)
This course is a study of appropriate ways of guiding and teaching young children. Emphasis is on guidance principles that develop a positive self-concept in early childhood while recognizing individual differences and varied family situations. The course includes observation of and participation with young children in child-care facilities and interpretation of anecdotal records and case studies of young children.

CHILD DEVELOPMENT (CD) 244 (4)
APPLICATION OF CHILD DEVELOPMENT LEARNING THEORIES (2 LEC., 5 LAB.)
This course provides application of child development learning theories with young children at the Parent/Child Study Center and other appropriate child-care facilities.

CHILD DEVELOPMENT (CD) 246 (3)
ADVANCED ADMINISTRATIVE PRACTICES FOR CHILD CARE FACILITIES (3 LEC.)
Prerequisite: Child Development 238. This course is a study of advanced administrative procedures for child-care programs. Topics include planning, financial management, personnel policies, evaluation, leadership styles, and facility design.

CHILD DEVELOPMENT (CD) 250 (3)
SUPPORTIVE SERVICES FOR EXCEPTIONAL CHILDREN (3 LEC.)
The focus of this course is on identifying local, state, and national resources for exceptional children and their families. Referral and resource information for special children is gathered through field studies, community involvement, and independent activities.

CHILD DEVELOPMENT (CD) 251 (4)
LEARNING PROGRAMS FOR CHILDREN WITH SPECIAL NEEDS (2 LEC., 5 LAB.)
This course focuses on successful model programs for encouraging maximum learning from young children with special needs. Materials, activities, and methods of working with children are examined.

CHILD DEVELOPMENT (CD) 253 (3)
ABUSE WITHIN THE FAMILY (2 LEC., 2 LAB.)
The symptoms and causes of abusive behaviors within the family are the focus of this course. Emphasis is on developing skills and competencies in working with these families to help them lessen and alleviate abusive behaviors and experiences.

CHILD DEVELOPMENT (CD) 813 (3)
(See Cooperative Work Experience)

COLLEGE LEARNING SKILLS (CLS) 100 (1)
COLLEGE LEARNING SKILLS (1 LEC.)
This course is for students who wish to extend their learning skills for academic or career programs. Individualized study and practice are provided in reading, study skills and composition. This course may be repeated for a maximum of three credits.

COMMUNICATIONS (COM) 131 (3)
APPLIED COMPOSITION AND SPEECH (3 LEC.)
Communication skills are studied as a means of preparing for one's vocation. Practice in writing letters, applications, resumes, and short reports is included.

COMMUNICATIONS (COM) 132 (3)
APPLIED COMPOSITION AND SPEECH (3 LEC.)
Prerequisite: Communications 131 or consent of instructor. The study of communication processes is continued. Emphasis is on written persuasion directly related to work. Expository techniques in business letters and documented reports are covered. Practice in oral communication is provided.

COMPUTING SCIENCE (CS) 174 (3)
FUNDAMENTALS OF COMPUTING (3 LEC.)
Prerequisite: Two years high school algebra or Developmental Mathematics 093. This course is an introductory course designed primarily for students desiring credit towards a minor or major in computor science or other scientific field. It includes a study of algorithms and an introduction to a procedure-oriented language with general applications.

COMPUTING SCIENCE (CS) 175 (3)
INTRODUCTION TO COMPUTOR SCIENCE (3 LEC.)
This course is an introduction to the fundamentals of information processing machines. Topics include history of computers, vocabulary, cultural impact, development of basic algorithms, number systems, and applications of elementary programming logic made through the use of the BASIC programming language.

COMPUTING SCIENCE (CS) 181 (3)
INTRODUCTION TO FORTRAN PROGRAMMING (2 LEC., 2 LAB.)
Prerequisites: Computing Science 174 or Computing Science 175 and Math 101 or the consent of the instructor based on equivilent experience. This course is an introduction to computing techniques using the FORTRAN language. Emphasis is on applications used to solve numeric problems in engineering, physical science, and mathematics. Laboratory fee.

COMPUTING SCIENCE (CS) 182 (3)
INTRODUCTION TO BASIC PROGRAMMING (2 LEC., 2 LAB.)
Prerequisites: Computing Science 174 or Computing Science 175 or the consent of the instructor based on equivilent experience. An introduction to the BASIC programming language. Proficiency will be developed as the student codes and executes several BASIC programs using interactive computing equipment. Laboratory fee.

COMPUTING SCIENCE (CS) 183 (3)
INTRODUCTION TO PL1 PROGRAMMING (2 LEC., 2 LAB.)
Prerequisites: Computing Science 174 or Computing Science 175 or the consent of the instructor based on equivilent experience. Study of PL1 language with numeric and non-numeric applications. Computing techniques will be developed in such areas as program design, basic aspects of string processing, recursion, internal searchsort methods. and simple data structures. Laboratory fee.

COMPUTING SCIENCE (CS) 184 (3)
INTRODUCTION TO COBOL PROGRAMMING (2 LEC., 2 LAB.)
Prerequisites: Computing Science 174 or Computing Science 175 or the consent of the instructor based on equivilent experience. An introduction to the COBOL programming language. Topics will include algorithmic processes. problem solving methods, programming style, flow charts, and various files processing techniques. Emphasis is on the language, its flexibility and power rather than on applications. Laboratory fee.

COMPUTING SCIENCE (CS) 185 (3)
INTRODUCTION TO PASCAL PROGRAMMING (2 LEC., 2 LAB.)
Prerequisites: Computing Science 174 or Computing Science 175 and Math 101 or the consent of the instructor based on equivilent experience. This course is an introduction to PASCAL. Topics will include problem solving and structured programming techniques introduced through

examples from applications such as text processing, numerical computing, and simulation, together with programming assignments. Laboratory fee.

COMPUTING SCIENCE (CS) 186 (3)
INTRODUCTION TO ASSEMBLY LANGUAGE (2 LEC., 2 LAB.)
Prerequisites: Computing Science 174 or Computing Science 175 and six semester hours of computer programming or the consent of the instructor based on equivalent experience. This course is an introduction to ASSEMBLY language programming. Topics will include machine representation of data and instructions, logical inputoutput control systems, subroutine and addressing concepts, and presentation of selected macro instructions. Laboratory fee.

COMPUTING SCIENCE (CS) 250 (3)
CONTEMPORARY TOPICS IN COMPUTER SCIENCE (3 LEC.)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Recent developments and topics of current interest are studied. Topics may include introduction to micromini computer systems, programming languages, or other advanced data processing concepts such as CICS. May be repeated when topics vary.

COMPUTING SCIENCE (CS) 251 (4)
SPECIAL TOPICS IN COMPUTER SCIENCE (3 LEC., 3 LAB.)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of computer science and data processing are studied. Such topics may include advanced programming language concepts in BASIC, RPG II and RPG III, and PASCAL, or advanced data entry concepts. May be repeated when topics vary. Laboratory fee.

COOPERATIVE WORK EXPERIENCE
701, 711, 801, 811 (1)
702, 712, 802, 812 (2)
703, 713, 803, 813 (3)
704, 714, 804, 814 (4).
723, 733, 724, 734 for CVC ONLY
723, 733, 823, 824, 834 for BHC ONLY
Prerequisite: Completion of two courses in the student's major or instructor or coordinator approval. These courses consist of seminars and on-the-job experience. Theory and instruction received in the courses of the students' major curricula are applied to the job. Students are placed in work-study positions in their technical occupational fields. Their skills and abilities to function successfully in their respective occupations are tested. These work internship courses are guided by learning objectives composed at the beginning of each semester by the students, their instructors or coordinators, and their supervisors at work. The instructors determine if the learning objectives are valid and give approval for credit.

DATA PROCESSING (DP) 129 (4)
DATA ENTRY CONCEPTS (2 LEC., 5 LAB.)
Prerequsite: Office Careers 172 or one year of typing in high school or equivilent. This course provides skills using buffered display equipment. Emphasis is on speed and accuracy. Topics include performing the basic functions record formatting with protected and varible fields, and using a variety of source documents. Program control, multiple programs, and program chaining are also covered. Laboratory fee.

DATA PROCESSING (DP) 133 (4)
BEGINNING PROGRAMMING (3 LEC., 4 LAB.)
Prerequisites: Computing Science 175 or the consent of the instructor. Concurrent enrollment in Data Processing 138 is advised. This course introduces programming skills using the COBOL language. Skills in problem analysis, flowcharting, coding, testing, and documentation are developed. Laboratory fee.

DATA PROCESSING (DP) 136 (4)
INTERMEDIATE PROGRAMMING (3 LEC., 4 LAB.)
Prerequisites: Data Processing 133 and Data Processing 138 or the consent of the instructor. Study of COBOL language continues. Included are levels of totals, group printing concepts, table build and search techniques, ISAM disk concepts, matching record, and file maintenance concepts using disk. Laboratory fee.

DATA PROCESSING (DP) 137 (3)
DATA PROCESSING MATHEMATICS (3 LEC.)
Prerequisites: One year of high school algebra or Developmental Math 091 or the consent of the instructor. This course introduces the principles of computer computation. Topics include the number system, fundamental processes; number bases, and the application of mathematics to typical business problems and procedures.

DATA PROCESSING (DP) 138 (3)
SYSTEMS ANALYSIS AND DATA PROCESSING LOGIC (3 LEC.)
Prerequisite: Computing Science 175 or the consent of the instructor. Concurrent enrollment in Data Processing 133 is advised. This course presents basic logic needed for problem solving with the computer. Topics include flowcharting standards, techniques for basic logic operations, table search and build techniques, types of report printing, conditional tests, multiple record types, and sequential file maintenance. System flowcharting is introduced.

DATA PROCESSING (DP) 142 (3)
RPG PROGRAMMING (2 LEC., 2 LAB.)
Prerequisite: Data Processing 133 or the consent of the instructor. This course introduces programming skills using the RPG II language. Emphasis is on language techniques and not on operation and functioning of the equipent. Programming problems emphasize card images and disk processing, and will include basic listings with levels of totals, multicard records, exception reporting, look ahead feature, and multifile processing. Laboratory fee.

DATA PROCESSING (DP) 230 (4)
ADVANCED ASSEMBLY LANGUAGE CODING (3 LEC., 3 LAB.)
Prerequisite: Data Processing 231 or the consent of the instructor. The development of programming skills using the assembly language instruction set set of the system360 is covered. Topics include indexing, indexed sequential file organization, table search methods, data and bit manipulation techniques, code translation, advanced problem analysis, and debugging techniques. Floating point operations are introduced. Laboratory fee.

DATA PROCESSING (DP) 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. Training is given in the use of JCL and utilities. The emphasis of the operating system depends on the computer system used. Laboratory fee.

DATA PROCESSING (DP) 231 (4)
ADVANCED PROGRAMMING (3 LEC., 4 LAB.)
Prerequisite: Data Processing 136 or the consent of the instructor. This course focuses on basic concepts and instructions in the IBM 360370 Assembler language, using the standard instruction set emphasizing the decimal features, with a brief introduction to fixed point operations using registers. Selected macro instructions, table handling, editing printed output, and reading memory dumps are included. Laboratory fee.

DATA PROCESSING (DP) 232 (4)
APPLIED SYSTEMS (3 LEC., 4 LAB.)
Prerequisite: Data Processing 136 or the consent of the instructor. This course introduces and develops skills to analyze existing systems and to design new systems. Emphasis is on a case study involving all facets of system design from the original source of data to final reports. Flowcharts and documentation are included.

DATA PROCESSING (DP) 233 (4)
OPERATING SYSTEMS AND COMMUNICATIONS (3 LEC., 4 LAB.)
Prerequisite: Data Processing 133 or the consent of the instructor. Concepts and technical knowledge of an operating system, JCL, and utilities are presented. The internal functions of an operating system are analyzed. Training is given in the use of JCL and utilities. The emphasis of the operating system depends on the computer system used. Laboratory fee.

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.

DATA PROCESSING (DP) 242 (4)
COMPUTER HARDWARE AND DATA BASE SYSTEMS (3 LEC., 4 LAB.)
Prerequisites: Computing Science 175, one year of a high level language. Data Processing 138 or the consent of the instructor. The organization and architecture of large, medium, small, mini, and micro computers are compared. Topics include digital number systems, machine language and assemblers, on-line and off-line data base systems, and data management. Currently used data bases (IMS, TOTAL, ADABAS, etc.) and graphic systems are emphasized. Laboratory fee.

DATA PROCESSING (DP) 243 (3)
COMPUTER CENTER MANAGEMENT (3 LEC.)
Prerequisite: Computing Science 175, a minimum of one semester of high level language, or the consent of the instructor. The management of a computer center is examined. Topics include analyzing, planning, organizing and controlling installations. The organization, production orientation, control, and personnel of the data processing department are covered. The effects of these functions on information and real-time systems are explored. Methods for computer selection and evaluation are described.

DATA PROCESSING (DP) 244 (3)
BASIC PROGRAMMING (2 LEC., 2 LAB.)
Prerequisite: Computing Science 175 or the consent of the instructor. This course covers the fundamentals of the BASIC programming language. Students gain proficiency by writing and debugging programs using interactive microcomputers. Laboratory fee.

DATA PROCESSING (DP) 701, 711, 801, 811 (1)
(See Cooperative Work Experience)

DATA PROCESSING (DP) 702, 712, 802, 812 (2)
(See Cooperative Work Experience)

DATA PROCESSING (DP) 703, 713, 803, 813 (3)
(See Cooperative Work Experience)

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) 064 (1)
NURSING (1 LEC.)
This course is designed to develop an understanding of the measurements and terminology in medicine and calculations used in problems dealing with solutions and dosages. It is designed primarily for students in the nursing program.

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.

DRAFTING (DFT) 135 (2)
REPRODUCTION PROCESSES (1 LEC., 3 LAB.)

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.)

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

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

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

DRAFTING (DFT) 182 (2)
TECHNICIAN DRAFTING (1 LEC., 3 LAB.)

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.)

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.)

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.)

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.)

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.)

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.)

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) 234 (4)
ADVANCED TECHNICAL ILLUSTRATION (2 LEC., 6 LAB.)

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.)

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.)

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, pipe fitting, welded and seamless piping, pumps, and heat exchanges. Drawing techniques are emphasized in orthographic and isometric projections. Laboratory fee.

DRAFTING (DFT) 240 (3)
PRINTED CIRCUIT DESIGN (2 LEC., 4 LAB.)

Prerequisite: Drafting and Design Technology 231, concurrent enrollment in Drafting and Design Technology 231 or equivalent. This course develops skills in the design of double sided and multilayer printed circuit boards. Students design boards from schematics, parts lists, and manufacturing specifications. Some boards are designed for manual parts insertion and taped artworks. Others are designed for automatic parts insertion and digitized inputs for artworks. Laboratory fee.

DRAFTING (DFT) 241 (3)
INTEGRATED CIRCUIT DESIGN (2 LEC., 4 LAB.)

Prerequisites: Drafting and Design Technology 240, Electronics Technology 190, or equivalent. Must be taken concurrently with Electronics Technology 250. This course develops skills in the design of integrated circuits. Electronic theory and laboratory exercises in active devices are combined with drafting lectures and laboratory drafting to enable students to design simple integrated circuits from schematic diagram and given design rules. Laboratory fee.

DRAFTING (DFT) 242 (3)
ADVANCED INTEGRATED CIRCUIT DESIGN (2 LEC., 4 LAB.)

Prerequisite: Drafting and Design Technology 241. This course develops skills in the design of complex integrated circuits. Students work from schematic diagrams and two sets of given rules. Work is done to meet industrial standards of current technologies. Laboratory fee.

DRAFTING (DFT) 243 (3)
ADVANCED PRINTED CIRCUIT DESIGN (2 LEC., 4 LAB.)

Prerequisite: Drafting 240. This course includes the design of double-sided or multilayer boards containing several types of electronic components, requiring selection of integrated circuit chips and combination of gates. Industry standards are followed in design development. Laboratory fee.

DRAFTING (DFT) 245 (3)
COMPUTER AIDED DESIGN (2 LEC., 4 LAB.)

Prerequisites: Drafting 183 or Engineering 105. Capabilities and limitations of the electronic computer as an aid to the designer are studied. Drafting procedures using an interactive system with computer graphics are practiced. Forms and uses of computer aided products are viewed in perspective with the overall design process. Laboratory fee.

DRAFTING (DFT) 247 (3)
APPLIED PRINTED CIRCUIT DESIGN (2 LEC., 4 LAB.)

Prerequisite: Drafting 240. Special applications of printed circuit design techniques and principles in particular systems of design are studied. Specialization may be focused by classification of the electronic circuits, of resources for design, and of processes for manufacture of the printed circuits. Laboratory fee.

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

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

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

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

DRAFTING AND DESIGN TECHNOLOGY (DFT) 704, (4)
(See Cooperative Work Experience)
Prerequisite: Drafting 183.

DRAFTING AND DESIGN TECHNOLOGY (DFT) 804 (4)
(See Cooperative Work Experience)
Prerequisite: Drafting 704

DRAFTING AND DESIGN TECHNOLOGY (DFT) 814 (4)
(See Cooperative Work Experience)

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

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

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

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

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

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

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

Prerequisite: Mathematics 195 or the equivalent recommended. The mathematical theory of direct current circuits is presented in combination with laboratory fundamentals. Emphasis is on elementary principles of magnetism, electric concepts and units, diagrams, and resistance. Electromagnetism,

series and parallel circuits, simple meter circuits, conductors, and insulators are also stressed. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 191 (4)
AC CIRCUITS (3 LEC., 3 LAB.)

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) 192 (3)
DIGITAL COMPUTER PRINCIPLES (2 LEC., 2 LAB.)

Prerequisite: Electronics Techology 190. This course is a study of number systems and arithmetic in various bases. Included are truth tables, relay and diode logic analysis, logic symbols, and basic functions including NOT, AND, NAND, OR NOR, and EX-OR. Logic manipulations include basic laws, minterm, maxterm, sum of products, and product of sums expression forms. Venn diagrams, Veitch and Karnaugh reduction techniques, and circuit synthesis are also covered using design examples. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 193 (4)
ACTIVE DEVICES (3 LEC., 3 LAB.)

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

ELECTRONICS TECHNOLOGY (ET) 194 (3)
INSTRUMENTATION (2 LEC., 3 LAB.)

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

ELECTRONICS TECHNOLOGY (ET) 235 (4)
FUNDAMENTALS OF ELECTRICITY (3 LEC., 3 LAB.)

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

ELECTRONICS TECHNOLOGY (ET) 238 (4)
LINEAR INTEGRATED CIRCUITS (3 LEC., 3 LAB.)

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

ELECTRONICS TECHNOLOGY (ET) 239 (3)
MICROWAVE TECHNOLOGY (3 LEC.)

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

ELECTRONICS TECHNOLOGY (ET) 250 (4)
PRINCIPLES OF ELECTRONIC INTEGRATED CIRCUITS (3 LEC., 2 LAB.)

Prerequisites: Electronics Technology 190 and concurrent enrollment in Drafting and Design Technology 241. This is a survey course of solid state devices and their associated circuitry. This course is intended to teach the student fundamentals of common electronic circuits which contain integrated circuits and to teach elements of solid state devices from the principle of the PN junction through the function of integrated circuits. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 260 (4)
SINUSOIDAL CIRCUITS (3 LEC., 3 LAB.)

Prerequisites: Electronics Technology 191 and 193. Power supply circuits are presented. Included are full wave rectification, filtering, and regulation. Amplifier circuits involving large and small signal analysis, coupling, classes of operation and feedback techniques are also covered. Semiconductor devices considered include the Zener diode, SCR, TRIAC, MOSFET, JFET, CMOS, and unijunction. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 261 (4)
PULSE AND SWITCHING CIRCUITS (3 LEC., 3 LAB.)

Prerequisites: Electronics Technology 191 and 193. Thevenin's theorem and superposition are applied to AC and DC sources. Waveform analysis is studied including pulse characteristics and pulsetrain measurements of harmonic content. Other topics include RC and RL circuit response to step inputs, exponential forms, diode clipper and clamp circuits, and transistor action in digital circuits involving saturation and cutoff. Gate types of RTL, DTL, TTL, ECL, and MOS technologies are also included. The bistable, monostable, and astable types of multivibrator circuits are covered. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 263 (4)
DIGITAL COMPUTER THEORY (3 LEC., 3 LAB.)

Prerequisite: Electronics Technology 192. This course focuses on basic computer circuits. Included are flip-flops, shift registers, counters (sequential and nonsequential), operational amplifiers, and A to D converters. Analysis of specific current integrated circuits is also included. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 264 (4)
DIGITAL SYSTEMS (3 LEC., 3 LAB.)

Prerequisite: Electronics Technology 192. The three major component systems of a digital computer are studied. The arithmetic-logic section covers arithmetic in binary, hexadecimal, counting, and number representation within a machine. The memory studies center around the operation of core and semiconductor memory assemblies which include addressing and data buffering. The control section deals with state, distributor, and ROM type of control circuits. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 265 (3)
DIGITAL RESEARCH (1 LEC., 5 LAB.)

Prerequisites: Electronics Technology 192 and concurrent enrollment in

Electronics Technology 263 and 264. The design, layout, construction, and calibrating of a major electronic project are covered. The project uses digital circuits. Students develop independent projects and prepare term papers on functions of components, operating specifications, and schematics.

ELECTRONICS TECHNOLOGY (ET) 266 (4)
COMPUTER APPLICATIONS (3 LEC., 3 LAB.)

Prerequisite: Electronics Technology 192. Machine language and assembly language programming are the focus of this course. Emphasis is on problem solving for in-house computers. Hardware trouble-shooting techniques for both computer mainframe and input and output devices are covered. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 267 (4)
MICROPROCESSORS (3 LEC., 3 LAB.)

Prerequisite: Electronics Technology 192. This course is a study of microcomputers. Topics include architecture, software, interfacing, microprocessors, and microcomputer systems. Emphasis is on practical applications using in-house microcomputers. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 268 (4)
ADVANCED MICROPROCESSORS (3 LEC., 3 LAB.)

Prerequisite: Electronic Technology 267. The study of microprocessors is continued. Emphasis is on hardware troubleshooting, diagnostic programming, and peripheral interface and control concepts. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 802 (2)
(See Cooperative Work Experience)

ELECTRONICS TECHNOLOGY (ET) 713 (3)
(See Cooperative Work Experience)

ELECTRONICS TECHNOLOGY (ET) 704 (4)
(See Cooperative Work Experience)

ENGINEERING (EGR) 101 (2)
ENGINEERING ANALYSIS (2 LEC.)

Prerequisite: Two years of high school algebra or Developmental Mathematics 093 or the consent of the instructor. This course surveys the field of engineering. Topics include the role of the engineer in society and branches and specialties in engineering. Engineering analysis and computer programming are introduced. Practice is provided in analyzing and solving engineering problems. Computational methods and devices with an introduction to computer programming are also covered.

ENGINEERING (EGR) 105 (3)
ENGINEERING DESIGN GRAPHICS (2 LEC., 4 LAB.)

Graphic fundamentals are presented for engineering communications and engineering design. Topics include standard engineering graphical techniques, auxiliaries, sections, graphical analysis, and pictorial and working drawings. Laboratory fee.

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) 107 (3)
ENGINEERING MECHANICS I (3 LEC.)

Prerequisite: Credit or concurrent enrollment in mathematics 124. This course is a study of the statics of particles and rigid bodies with vector mathematics in three dimensional space. Topics include the equilibrium of forces and force systems, resultants, free body diagrams, friction, centroids and moments of inertia, virtual works, and potential energy. Distributed forces, centers of gravity, and analysis of structures, beams, and cables are also presented.

ENGINEERING (EGR) 108 (3)
COMPUTER METHODS IN ENGINEERING (3 LEC.)

Prerequisite: Credit or concurrent enrollment in Mathematics 126. Fundamental methods of numerical analysis with applications by computer programming are presented. Topics include computer programming, recursion formulas, successive approximations, error analysis, non-linear equations, and systems of linear equations and matrix methods. Probabilistic models, interpolation, determination of parameters, numerical integration, and solution of ordinary differential equations are also covered.

ENGINEERING (EGR) 188 (3)
STATICS (3 LEC.)

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

ENGINEERING (EGR) 189 (3)
CHARACTERISTICS AND STRENGTHS OF MATERIALS (3 LEC.)

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

ENGINEERING (EGR) 201 (3)
ENGINEERING MECHANICS II (3 LEC.)

Prerequisites: Engineering 107 and credit or concurrent enrollment in Mathematics 225. This is a study of dynamics. Particles and rigid bodies are examined as they interact with applied forces. Both constrained and general motions are included. Space, time, mass, velocity, acceleration, work and energy, impulse, and momentum are covered.

ENGINEERING (EGR) 202 (3)
ENGINEERING MECHANICS OF MATERIALS (3 LEC.)

Prerequisites: Engineering 107 and credit or concurrent enrollment in Mathematics 225. Simple structural elements are studied. Emphasis is on forces, deformation, and material properties. The concepts of stress, strain, and elastic properties are presented. Analysis of thin walled vessels, members loaded in tension, torsion, bending and shear, combined loadings, and stability conditions are included. Behavioral phenomena such as fracture, fatigue, and creep are introduced.

ENGINEERING (EGR) 203 (3)
ENGINEERING PRODUCTION (1 LEC., 5 LAB.)

Prerequisite: Engineering 105 or the consent of the instructor. The standard machining of metals is covered. Layout, turning, boring, shaping, drilling, threading, milling, and grinding are all included. The manufacturing of interchangeable parts, fixtures, and jigs with applications is studied. Laboratory fee.

ENGINEERING (EGR) 204 (3)
ELECTRICAL SYSTEMS ANALYSIS (3 LEC.)

Prerequisite: Credit or concurrent enrollment in Mathematics 225. Electrical science is introduced. Included are fundamental electrical systems and signals. Basic concepts of electricity and magnetism with mathematical representation and computation are also covered.

ENGINEERING (EGR) 205 (3)
PLANE SURVEYING (2 LEC., 4 LAB.)

Prerequisites: Mathematics 102 or 196 and Engineering 105 or Drafting 183. This course focuses on plane surveying. Topics include surveying instruments, basic measuring procedures, vertical and horizontal control,

error analysis, and computations. Traverse, triangulation, route alignments, centerlines, profiles, mapping, route surveying, and land surveying are also included. Laboratory fee.

ENGINEERING (EGR) 206 . (1)
ELECTRICAL ENGINEERING LABORATORY (3 LAB.)

Prerequisite: Credit or concurrent enrollment in Engineering 204. Various instruments are studied and used. These include the cathode ray oscilloscope, ammeters, voltmeters, ohmmeters, power supplies, signal generators, and bridges. Basic network laws, steady state and transient responses, and diode characteristics and applications are demonstrated. Computer simulation is introduced. Laboratory fee.

ENGLISH

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

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 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) 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.

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) 102 (3)
ECONOMIC GEOGRAPHY (3 LEC.)

The relation of humans to their environment is studied. Included is the use of natural resources. Problems of production, manufacturing, and distributing goods are explored. Primitive subsistence and commercialism are considered.

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) 201 (4)
INTRODUCTION TO ROCK AND MINERAL IDENTIFICATION (3 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) 202 (4)
INTRODUCTION TO ROCK AND MINERAL IDENTIFICATION (3 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.

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.

GRAPHIC ARTS (GA) 131 (3)
GRAPHIC PROCESSES (2 LEC., 4 LAB.)
This course focuses on industrial requirements of employees in graphic arts. Habits and abilities are included. An overview of equipment is provided and its use demonstrated. Laboratory fee.

GRAPHIC ARTS (GA) 134 (3)
BASIC CAMERA OPERATIONS (2 LEC., 4 LAB.)
Prerequisite: Graphic Arts 131. The operations and mechanics of the photo-lithographic camera are described. Included are fundamentals of halftone photography, lithographic negative stripping, and plate making. Laboratory fee.

GRAPHIC ARTS (GA) 136 (3)
COPY PREPARATION (2 LEC., 4 LAB.)
Prerequisite: Concurrent enrollment in Graphic Arts 131. The basic operations of the varityper and headliner are studied. Letters, memos, manuals, tables, graphs, charts, reports, and booklets are produced. The drafting table and modern drafting tools are used. Steps from setting bold heading to finishing rough copy and preparing for the photographic master are included. Laboratory fee.

GRAPHIC ARTS (GA) 140 (3)
OFFSET PRINTING I (2 LEC., 4 LAB.)
Prerequisite: Credit or concurrent enrollment in Graphic Arts 131. The principles of offset lithography are covered. Included is operation of the small offset lithographic press. Laboratory fee.

GRAPHIC ARTS (GA) 206 (3)
GRAPHIC PROJECTS (2 LEC., 4 LAB.)
Prerequisite: Concurrent enrollment or 16 hours of credit in Graphic Arts. This course provides problem analysis and project development. It gives the student the opportunity of producing a complete printed product. Laboratory fee.

GRAPHIC ARTS (GA) 240 (3)
OFFSET PRINTING II (2 LEC., 4 LAB.)
Prerequisite: Graphic Arts 140. Continuing development of the student in offset lithography is offered. Capabilities and limitations of presses are explored. Printed products are planned and produced. Emphasis is on standard production requirements and maintenance of equipment. Laboratory fee.

GRAPHIC ARTS (GA) 714, 814 (4)
(See Cooperative Work Experience)

HISTORY (HST) 101 (3)
HISTORY OF THE UNITED STATES (3 LEC.)
The history of the United States is presented, beginning with the European background and first discoveries. The pattern of exploration, settlement, and development of institutions is followed throughout the colonial period and the early national experience to 1877. (This course is offered on campus and may be offered via television.)

HISTORY (HST) 102 (3)
HISTORY OF THE UNITED STATES (3 LEC.)
The history of the United States is surveyed from the reconstruction era to the present day. The study includes social, economic, and political aspects of American life. The development of the United States as a world power is followed. (This course is offered on campus and may be offered via television.)

HISTORY (HST) 105 (3)
WESTERN CIVILIZATION (3 LEC.)
The civilization in the West from ancient time through the Enlightenment is surveyed. Topics include the Mediterranean world, including Greece and Rome, the Middle Ages, and the beginnings of modern history. Particular emphasis is on the Renaissance, Reformation, the rise of the national state, the development of parliamentary government, and the influences of European colonization.

HISTORY (HST) 106 (3)
WESTERN CIVILIZATION (3 LEC.)
This course is a continuation of History 105. It follows the development of civilization from the enlightenment to current times. Topics include the Age of Revolution, the beginning of industrialism, 19th century, and the social, economic, and political factors of recent world history.

HISTORY (HST) 110 (3)
THE HERITAGE OF MEXICO (3 LEC.)
This course (cross-listed as Anthropology 110) is taught in two parts each semester. The first part of the course deals with the archaeology of Mexico beginning with the first humans to enter the North American continent and culminating with the arrival of the Spanish in 1519 A.D. Emphasis is on archaic cultures, the Maya, the Toltec, and the Aztec empires. The second

part of the course deals with Mexican history and modern relations between the United States and Mexico. The student may register for either History 110 or Anthropology 110, but may receive credit for only one of the two.

HISTORY (HST) 112 (3)
LATIN AMERICAN HISTORY (3 LEC.)

This course presents developments and personalities which have influenced Latin American history. Topics include Indian cultures, the Conquistadors, Spanish administration, the wars of independence, and relations with the United States. A brief survey of contemporary problems concludes the course.

HISTORY (HST) 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.

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 nonverbal behavior, listening, and conflict resolution.

HUMAN DEVELOPMENT (HD) 106 (3)
PERSONAL AND SOCIAL GROWTH (3 LEC.)

This course focuses on the interaction between the individual and society. Societal influences, adjustment to social change, personal roles, and problem-solving are stressed. Components of a healthy personality, alternative behaviors, and lifestyles that demonstrate a responsibility to self and society are studied.

HUMAN DEVELOPMENT (HD) 107 (3)
DEVELOPING LEADERSHIP BEHAVIOR (3 LEC.)

The basic purpose of this course is to help the student develop leadership and human relation skills. Topics include individual and group productivity, value systems, appropriate communication skills, and positive attitudes in a group environment. The concepts of leadership are explored through both theory and practice. These leadership activities can be applied to the student's personal, business, and professional interactions.

HUMAN DEVELOPMENT (HD) 110 (1)
ASSESSMENT OF PRIOR LEARNING (1 LEC.)

Prerequisite: Limited to students in Technical/Occupational programs. The consent of the instructor is required. This course is designed to assist students in documenting prior learning for the purpose of applying for college credit. Students develop a portfolio which includes a statement of educational/career goals, related noncollegiate experiences which have contributed to college-level learning, and documentation of such experiences. This course may be repeated for credit.

HUMANITIES (HUM) 101 (3)
INTRODUCTION TO THE HUMANITIES (3 LEC.)

Related examples of humans' creative achievements are examined. Emphasis is on understanding the nature of humans and the values of human life. (This course is offered on campus and may be offered via television. Laboratory fee required for television course.)

HUMANITIES (HUM) 102 (3)
ADVANCED HUMANITIES (3 LEC.)

Prerequisite: Humanities 101 and/or the consent of the instructor. Human value choices are presented through the context of the humanities. Universal concerns are explored, such as a person's relationship to self and to others and the search for meaning. The human as a loving, believing and hating being is also studied. Emphasis is on the human as seen by artists, playwrights, filmmakers, musicians, dancers, philosophers, and theologians. The commonality of human experience across cultures and the premises for value choices are also stressed.

HUMAN SERVICES (HS) 131 (3)
ORIENTATION TO HUMAN SERVICES (3 LEC.)

This course introduces the field of human services. Students explore their interest and potential for working in a social service agency. Contacts with community social service agencies are made.

HUMAN SERVICES (HS) 230 (3)
NURSING HOME ACTIVITY DIRECTOR TRAINING (2 LEC., 4 LAB.)

The role of the nursing home activity director is the focus of this course. Both the roles of the nursing home and of the activities program are covered. Topics include the nursing home's historical development and relationship to the community, need and resource assessment, specialized knowledge about the aged resident, and interviewing skills. Program planning, working in groups, programming activities, developing an activities department, and therapeutic techniques in the nursing home are also included.

HUMAN SERVICES (HS) 233 (3)
COUNSELING FOR THE PARAPROFESSIONAL (3 LEC.)

Prerequisite: Permission of the coordinator of the Human Services Program. The principles and practices of interviewing and counseling are introduced. The effectiveness of these techniques are explored for counselors, group counselor aides, mental health or social worker

associates, and other "new careers" in people-to-people services.

HUMAN SERVICES (HS) 235 (3)
INTRODUCTION TO MENTAL HEALTH (3 LEC.)

Prerequisites: Psychology 105 or consent of the coordinator of the Human Services Program. Field work. This course focuses on the field of mental health. Topics include history, terms concepts, and ethics. Behavior and environmental factors promoting mental health are analyzed. Skills for identifying symptoms of maladjustment are developed. Ways to provide for emotional outlets and emotional control are considered.

HUMAN SERVICES (HS) 244 (3)
SOCIAL WORK PROBLEMS AND PRACTICES (3 LEC.)

Prerequisite: Concurrent enrollment in Human Services 803. Social work experiences are discussed and problems analyzed with other students in the Human Services Program, meeting three hours per week with the program coordinator.

HUMAN SERVICES (HS) 245 (3)
SOCIAL WORK PROBLEMS AND PRACTICES (3 LEC.)

Prerequisite: Concurrent enrollment in Human Services 813. Social work experiences are discussed and problems analyzed with other students in the human services program meeting three hours per week with the program coordinator.

HUMAN SERVICES (HS) 703, 713 (3)
(See Cooperative Work Experience)

HUMAN SERVICES (HS) 704, 714, (3)
(See Cooperative Work Experience)

HUMAN SERVIECS (HS) 802, 812, (4)
(See Cooperative Work Experience)

HUMAN SERVICES (HS) 803 (3)
(See Cooperative Work Experience) Prerequisite: Concurrent enrollment in Human Services 244.

HUMAN SERVICES (HS) 813 (3)
(See Cooperative Work Experience) Prerequisite: Concurrent enrollment in Human Services 245.

HUMAN SERVICES (HS) 804, 814, (4)
(See Cooperative Work Experience)

JOURNALISM (JN) 101 (3)
INTRODUCTION TO MASS COMMUNICATIONS (3 LEC.)

This course surveys the field of mass communications. Emphasis is on the role of mass media in modern society.

JOURNALISM (JN)102 (3)
NEWS GATHERING AND WRITING (2 LEC., 3 LAB)

Prerequisite: Typing ability. This course teaches what is news, news gathering techniques, and how to write the straight news story. Students write for the campus newspaper as part of the class. This is the basic course usually required for all future study in newspaper and magazine writing, advertising, broadcast journalism and public relations.

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

Prerequisite: Journalism 102. This is a continuation of Journalism 102 and is designed to sharpen the skills learned in that course. Students study more complex types of stories, such as features, profiles, follow-up stories, and sidebars. All students write for the campus newspaper as part of the class.

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

Prerequisite: The consent of the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. Individual staff assignments are made for the student newspaper. Assignments may be made in writing, advertising, photography, cartooning, or editing. Students are required to work at prescribed periods under supervision and must attend staff meetings.

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

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

JOURNALISM (JN) 106 (1)
STUDENT PUBLICATIONS (3 LAB.)

Prerequisite: The consent of the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. The course is a continuation of Journalism 105.

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

Prerequisite: Six hours of journalism or the consent of the instructor. This course covers research, interviewing techniques, and the development of feature stories for use in newspapers and magazines.

JOURNALISM (JN) 204 (3)
NEWS EDITING AND COPY READING (3 LEC.)

Prerequisite: Journalism 102. This course focuses on editing news for newspaper, radio, and television. Emphasis is on writing headlines and laying out pages.

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 Mid-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 Mid-Management Program. This course is a continuation of Mid-Management 150. It provides for supervised employment in the student's chosen field.

MANAGEMENT (MGT) 153 (3)
SMALL BUSINESS MANAGEMENT (3 LEC.)

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 Mid-Management 150 and preliminary interview by Mid-Management faculty. This course is for students majoring in Mid-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: Mid-Management 150 and 154 and concurrent enrollment in Mid-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) 160 (3)
PRINCIPLES OF PURCHASING (3 LEC.)

An introduction to the purchasing function is provided. The course covers purchasing tasks and responsibilities, analytical techniques in buying, organizational interrelationships and coordination, measurement and control, and legal implications. Special emphasis is placed on the five tenets of buying: quality, quantity, time, price, and source.

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) 220 (3)
MATERIALS MANAGEMENT (3 LEC.)

A study of the materials management concept, which includes the separate functions of purchasing, transportation, production, inventory control, warehousing, and trafficking is provided. Special emphasis is given to cost effectiveness, the materials cycle, contribution to organizational objectives, performance measurement, inventory cost trade-offs, and forecasting.

MANAGEMENT (MGT) 224 (3)
QUALITY ASSURANCE (3 LEC.)

A study of the techniques, concepts, and systems utilized in controlling quality is included. Special emphasis is placed on sampling techniques (methodology and results), acceptance/rejection procedures, procurement quality assurance, tooling inspection, and quality program planning and maintenance.

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 practice 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: Mid-Management 150 and Mid-Management 151; concurrent enrollment in Mid-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: Mid-Management 150 and 151; concurrent enrollment in Mid-Management 255. This course continues Mid-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: Mid-Management 151 and Mid-Management 155; concurrent enrollment in Mid-Management 250. Organizational objectives and management of human resources are studied. The various approaches to organizational theory are applied to the student's work experiences.

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

Prerequisites: Mid-Management 250 and Mid-Management 254; concurrent enrollment in Mid-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 experiences.

MANAGEMENT (MGT) 280 (3)
INDUSTRIAL MANAGEMENT (3 LEC.)

Prerequisite: Mid-Management 136. This course is an overview of the relationship of industrial functions. The philosophy and practices of management are included. Topics cover plant location and layout.

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) 104 (5)
ELEMENTARY FUNCTIONS AND COORDINATE GEOMETRY I (5 LEC.)

Prerequisites: Two years of high school algebra or Developmental Mathematics 093. This course includes the concept of function, polynomials of one or more variables, arithmetic and geometric sequences, combinations and the binomial theorem, rational functions, exponential functions, logarithmic functions, trigonometric functions, complex numbers, vectors, functions of two variables and

analytical geometry which includes conics, transformation of coordinates, polar coordinates, parametric equations and three dimensional space.

MATHEMATICS (MTH) 105 (5)
ELEMENTARY FUNCTIONS AND COORDINATE GEOMETRY II (5 LEC.)

Prerequisite: Mathematics 104. This course is a continuing study of the topics of Mathematics 104.

MATHEMATICS (MTH) 106 (5)
ELEMENTARY FUNCTIONS AND COORDINATE GEOMETRY III (5 LEC.)

Prerequisites: Two years of high school algebra and one semester of trigonometry. This course is a study of the algebra of functions. It includes polynomial, rational, exponential, logarithmic and trigonometric functions, functions of two variables, complex numbers, vectors and analytic geometry which includes conics, transformation of coordinates, polar coordinates, and parametric equations.

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

Prerequisite: Two years of high school algebra or Developmental Mathematics 093. This course includes equations, inequalities, matrices, linear programming, and linear, quadratic, polynomial, rational, exponential, and logarithmic functions. Applications to business and economics problems are emphasized.

MATHEMATICS (MTH) 112 (3)
MATHEMATICS FOR BUSINESS AND ECONOMICS II (3 LEC.)

Prerequisite: Mathematics 111. This course includes sequences and limits, differential calculus, integral calculus, and appropriate applications.

MATHEMATICS (MTH) 115 (3)
COLLEGE MATHEMATICS I (3 LEC.)

Prerequisites: One year of high school algebra and one year of high school geometry or two years of high school algebra or Developmental Mathematics 093. Designed for liberal arts students, this course includes the study of logic, mathematical patterns, mathematical recreations, systems of numeration, mathematical systems, sets and statements and sets of numbers. Historical aspects of selected topics are emphasized.

MATHEMATICS (MTH) 116 (3)
COLLEGE MATHEMATICS II (3 LEC.)

Prerequisite: One year of high school algebra and one year of high school geometry or two years of high school algebra or Developmental Mathematics 093. Designed for liberal arts students, this course includes the study of algebra, linear programming, permutations, combinations, probability and geometry. Historical aspects of selected topics are emphasized.

MATHEMATICS (MTH) 117 (3)
FUNDAMENTAL CONCEPTS OF MATHEMATICS FOR ELEMENTARY TEACHERS (3 LEC.)

This course includes the structure of the real number system, geometry, and mathematical analysis. Emphasis is on the development of mathematical reasoning needed for elementary teachers.

MATHEMATICS 121 (3)
ANALYTIC GEOMETRY (3 LEC.)

Prerequisite: Mathematics 102 or equivalent. This course is a study of the real numbers, distance, the straight line, conics, transformation of coordinates, polar coordinates, parametric equations, and three-dimensional space.

MATHEMATICS (MTH) 124 (5)
CALCULUS I (5 LEC.)

Prerequisite: Mathematics 105 or 106 or 121 or the equivalent. This course is a study of limits, continuity, derivatives, and integrals of algebraic and 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) 139 (3)
APPLIED MATHEMATICS (3 LEC.)

Prerequisite: One year of high school algebra or Developmental Mathematics 091 or equivalent. An effort will be made to tailor this course fo fit the needs of the students enrolled in each semester. The course is a study of commercial, technical, and other applied uses of mathematics.

MATHEMATICS (MTH) 195 (3)
TECHNICAL MATHEMATICS (3 LEC.)

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) 221 (3)
LINEAR ALGEBRA (3 LEC.)

Prerequisite: Mathematics 124 or equivalent. This course is a study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, n-dimensional space, and linear transformation.

MATHEMATICS (MTH) 225 (4)
CALCULUS II (4 LEC.)

Prerequisite: Mathematics 124 or the equivalent. This course is a study of techniques of integration, polar coordinates, parametric equations, topics in vector calculus, sequences, series, indeterminate forms, and partial differentiation with applications.

MATHEMATICS (MTH) 226 (3)
CALCULUS III (3 LEC.)

Prerequisite: Mathematics 225 or the equivalent. This course is a study of topics in vector calculus, functions of several variables, and multiple integrals, with applications.

MATHEMATICS (MTH) 230 (3)
DIFFERENTIAL EQUATIONS (3 LEC.)

Prerequisite: Mathematics 225 or the consent of the instructor. This course is a study of ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and applications.

MUSIC (MUS) 101 (4)
FRESHMAN THEORY (3 LEC., 3 LAB.)

Musicianship skills are developed. Emphasis is on tonal and rhythmic perception and articulation. The essential elements of music are presented, and sight-singing, keyboard, and notation are introduced.

MUSIC (MUS) 102 (4)
FRESHMAN THEORY (3 LEC., 3 LAB.)

Prerequisite: Music 101 or the consent of the instructor. This course introduces part-writing and harmonization with triads and their inversions. Also included are the classification of chords, seventh chords, sight-singing, dictation, and keyboard harmony.

MUSIC (MUS) 103 (1)
GUITAR ENSEMBLE (3 LAB.)

Music composed and arranged for a guitar ensemble is performed. Works for a guitar and a different instrument or for guitar and a voice are also included. This course may be repeated for credit.

MUSIC (MUS) 104 (3)
MUSIC APPRECIATION (3 LEC.)

The basic elements of music are surveyed and examined in the music literature of western civiliazation, particularly from the Baroque Period to the present. Cultural influences on the music of each era are observed.

MUSIC (MUS) 105 (1)
ITALIAN DICTION (2 LAB.)

The phonetic sounds of the Italian language are studied. Included is selected vocabulary. This course is primarily for voice majors.

MUSIC (MUS) 106 (1)
FRENCH DICTION (2 LAB.)

The phonetic sounds of the French language are studied. Included is selected vocabulary. This course is primarily for voice majors.

MUSIC (MUS) 107 (1)
GERMAN DICTION (2 LAB.)

The phonetic sounds of the German language are studied. Included is selected vocabulary. This course is primarily for voice majors.

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.

APPLIED MUSIC

Subject to enrollment, students may receive private instruction in the following courses: piano, organ, voice, violin, viola, cello, double bass, flute, oboe, clarinet, bassoon, saxophone, trumpet, french horn, trombone, baritone, tuba, percussion, guitar, electric bass, and drum set. Private music 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) 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) 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.)

Prerequisites: Credit or concurrent enrollment in Office Careers 172 or one year of typing in high school. The principles of Gregg Shorthand are introduced. Included is the development of the ability to read, write, and transcribe shorthand outlines. Knowledge of the mechanics of English is also developed. Laboratory fee.

OFFICE CAREERS (OFC) 160 (3)
OFFICE 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.)
Prerequisites: Office Careers 159 or one year of shorthand in high school, Office Careers 172 or one year of typing in high school. The principles of Gregg Shorthand are studied. Emphasis is on increased speed dictation, accuracy in typing from shorthand notes, and beginning techniques of transcription skills. Also included are oral reading, speedbuilding, and grammar. Laboratory fee.

OFFICE CAREERS (OFC) 172 (3)
BEGINNING TYPEWRITING (2 LEC., 3 LAB.)
This course is for students with no previous training in typewriting. Fundamental techniques in typewriting are developed. The skills of typing manuscripts, business letters, and tabulations are introduced. Laboratory fee.

OFFICE CAREERS (OFC) 174 (2)
INTERMEDIATE TYPEWRITING (1 LEC., 2 LAB.)
Prerequisites: Office Careers 172 or one year of typing in high school. Typing techniques are developed further. Emphasis is on problem solving. Increasing speed and accuracy in typing business forms, correspondence, and manuscripts is also covered. Laboratory fee.

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) 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 and retrieving documents, and managing word processing systems are also covered. Transcribing and magnetic keyboarding skills are developed. Typing skills and English mechanics are reinforced.

OFFICE CAREERS (OFC) 266 (4)
ADVANCED SHORTHAND (3 LEC., 2 LAB.)
Prerequisites: Office Careers 166 or two years of shorthand in high school, Office Careers 174 or two years of typing in high school. Emphasis is on building dictation speed. Producing mailable, typed transcriptions under timed conditions is also stressed. Vocabulary and extensive production work capabilities are developed. Laboratory fee.

OFFICE CAREERS (OFC) 273 (2)
ADVANCED TYPEWRITING (1 LEC., 2 LAB.)
Prerequisites: Office Careers 174 or two years of typing in high school. Decisionmaking and production of all types of business materials under timed conditions are emphasized. A continuation of skill development and a review of typing techniques are also stressed. Accuracy at advanced speeds is demanded. Laboratory fee.

OFFICE CAREERS (OFC) 275 (3)
SECRETARIAL PROCEDURES (3 LEC.)
Prerequisites: Credit or concurrent enrollment in Office Careers 174, credit or concurrent enrollment in either Office Careers 166 or Office Careers 265. Emphasis is on initiative, creative thinking, and follow-through. Topics include in-basket exercises, decision-making problems, and use of shorthand and transcription skills. Public and personal relations, supervisory principles, business ethics, and the organizing of time and work are also covered.

OFFICE CAREERS (OFC) 803, 813 (3)
(See Cooperative Work Experience)

OFFICE CAREERS (OFC) 804, 814 (4)
(See Cooperative Work Experience)

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) 207 (3)
HISTORY OF ANCIENT PHILOSOPHY (3 LEC.)
The history of philosophy from pre-Socratic times to the Renaissance is examined. Connections are made between the pre-Socratics, Plato, and Aristotle. Stoicism, Epicureanism, and Scholasticism are considered.

PHILOSOPHY (PHI) 208 (3)
HISTORY OF MODERN PHILOSOPHY (3 LEC.)
The history of philosophy from the Renaissance through the 19th century is examined. Emphasis is on continental rationalism, British empiricism, Kantian metaphysics and epistemology, and the Hegelian system as it relates to 20th century philosophies. The historical relationship between these schools of thought is explored.

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.

PHOTOGRAPHY (PHO) 207 (3)
PHOTOGRAPHY FOR PUBLICATIONS (2 LEC., 4 LAB.)

This course is designed for the student who is interested in journalistic editing, publications photography, and graphic arts procedures. It encourages skills in all three areas and prepares the student for a broad job market that includes photojournalism, printing, editing, composing, and general copy preparation. Students who enroll in this course should have a background in journalism, photography, and graphic arts and be of sophmore standing. Laboratory fee.

PHYSICAL EDUCATION ACTIVITY COURSES

The Physical Education Division provides opportunity for each student to become skilled in at least one physical activity for personal enjoyment of leisure time. Activity courses are open to both men and women. A laboratory fee is required. Students are urged to take advantage of the program by registering for a physical education activity course each semester.

PHYSICAL EDUCATION (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) 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) 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) 126 (1)
AEROBIC DANCE (3 LAB.)

This is a dance class which rhythmically combines dance movement with walking, jogging, and jumping to cause sustained vigorous combination of steps, geared to raise the heart rate to a proper target zone for conditioning purposes. Each routine can be "danced" at different intensities, depending on the physical condition of each participant. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 127 (1)
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) 128 (1)
SOCIAL AND FOLK DANCE (3 LAB.)

Social and folk dance is introduced. Laboratory fee.

PHYSICAL EDUCATION (PEH) 129 (1)
MODERN DANCE (3 LAB.)

This beginning course is designed to emphasize basic dance technique, including body alignment and placement, floor work, locomotor patterns, and creative movements. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 131 (1)
WEIGHT TRAINING AND CONDITIONING (3 LAB.)

Instruction and training in weight training and conditioning techniques are offered. A uniform is required. This course may be repeated for credit. Laboratory fee.

PHYSICAL EDUCATION (PEH) 132 (1)
SELF-DEFENSE (3 LAB.)

Various forms of self-defense are introduced. The history and philosophy of the martial arts are explored. The student should progress from no previous experience in self-defense to an adequate skill level covering basic self-defense situations. Both mental and physical aspects of the arts are stressed.

PHYSICAL EDUCATION (PEH) 134 (1)
OUTDOOR EDUCATION (3 LAB.)

Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. Laboratory fee.

PHYSICAL EDUCATION (PEH) 144 (3)
INTRODUCTION TO PHYSICAL EDUCATION (3 LEC.)

This course is for students majoring in physical education and is designed for professional orientation in physical education, health, and recreation. The history, philosophy, and modern trends of physical education are surveyed.

Topics include teacher qualifications, vocational opportunities, expected competencies, and skill testing.

PHYSICAL EDUCATION (PEH) 147 (3)
SPORTS OFFICIATING I (2 LEC., 2 LAB.)

This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are football, basketball, and other sports as appropriate. Students are expected to officiate intramural games.

PHYSICAL EDUCATION (PEH) 148 (3)
SPORTS OFFICIATING II (2 LEC., 2 LAB.)

This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are softball, track and field, baseball, and other sports as appropriate. Students are expected to officiate intramural games.

PHYSICAL EDUCATION (PEH) 200 (1)
LIFETIME SPORTS ACTIVITIES II (3 LAB.)

This course is a continuation of Physical Education 100. Students participate in selected activities. Instruction is at the intermediate and intermediate/advanced levels. This course may be repeated for credit. Laboratory fee.

PHYSICAL EDUCATION (PEH) 217 (1)
INTERMEDIATE ARCHERY (3 LAB.)

This course is for the student who has previous experience in archery. Target shooting and field archery are emphasized. The student must furnish equipment. Laboratory fee.

PHYSICAL EDUCATION (PEH) 218 (1)
INTERMEDIATE GOLF (2 LAB.)

Prerequisite: The consent of the instructor. Skills and techniques in golf are developed beyond the "beginner" stage. Green fee paid by student. Laboratory fee.

PHYSICAL EDUCATION (PEH) 219 (1)
INTERMEDIATE TENNIS (3 LAB.)

Prerequisite: The consent of the instructor. Skills and techniques in tennis are developed beyond the "beginner" stage. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 222 (1)
INTERMEDIATE GYMNASTICS (3 LAB.)

Prerequisite: Physical Education 122. Skills and techniques in gymnastics are developed beyond the "beginner" stage. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 223 (1)
INTERMEDIATE SWIMMING (2 LAB.)

Prerequisite: Beginning swim certificate or deep water swimmer. This course advances the swimmer's skills. Stroke analysis, refinement, and endurance are emphasized. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 225 (2)
SKIN AND SCUBA DIVING (1 LEC., 2 LAB.)

Prerequisite: Physical Education 223 or the consent of the instructor. This course includes the use of equipment, safety, physiology, and open water diving. All equipment is supplied except mask, fins, and snorkel. The student may rent needed equipment at the time on registration. Students completing course requirements receive certification as basic scuba divers from the Professional Association of Diving Instructors (PADI) or the National Association of Underwater Instructors (NAUI). Laboratory fee.

PHYSICAL EDUCATION (PEH) 226 (1)
ADVANCED LIFE SAVING (2 LAB.)

Prerequisite: Physical Education 223 or deep water swim ability. This course qualifies students for the Red Cross Advanced Lifesaving Certificate. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 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) 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.

PHYSICAL SCIENCE (PSC) 118 (4)
PHYSICAL SCIENCE (3 LEC., 3 LAB.)

This course is primarily for non-science majors. It is a study of the basic principles and concepts of physics, chemistry, and nuclear science. The three basic sciences are related to the physical world at an introductory level. Laboratory fee.

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 pre-dental, biology, pre-medical, pre-pharmacy, and pre-architecture majors and other students who need a two-semester technical course in physics. Mechanics and heat are studied. Laboratory fee.

PHYSICS (PHY) 112 (4)
INTRODUCTORY GENERAL PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Physics 111. This course is a continuation of Physics 111. Electricity, magnetism, light, and sound are studied. Laboratory fee.

PHYSICS (PHY) 117 (4)
CONCEPTS IN PHYSICS (3 LEC., 3 LAB.)

This course is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on classical mechanics and thermodynamics. Historical developments and their impact on daily life are included. The principle of energy conservation is stressed, and current problems of world-wide energy production are examined. Laboratory fee.

PHYSICS (PHY) 118 (4)
CONCEPTS IN PHYSICS (3 LEC., 3 LAB.)

This is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on modern developments in physics. Topics include acoustics, electricity and magnetism, light and the electromagnetic spectrum, atomic physics, and relativity. Laboratory fee.

PHYSICS (PHY) 131 (4)
APPLIED PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Mathematics 195 or concurrent enrollment in Mathematics 195. This course is primarily for students in technical programs. The properties of matter, mechanics, and heat are introduced. Emphasis is on uses and problem-solving. Laboratory fee.

PHYSICS (PHY) 201 (4)
GENERAL PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Credit or concurrent enrollment in Mathematics 124. This course is designed primarily for physics, chemistry, mathematics, and engineering majors. The principles and applications of mechanics, wave motion, and sound are studied. Emphasis is on fundamental concepts, problem-solving, notation, and units. The laboratory includes a one-hour problem session. Laboratory fee.

PHYSICS (PHY) 202 (4)
GENERAL PHYSICS (3 LEC., 3 LAB.)

Prerequisites: Physics 201 and credit or concurrent enrollment in Mathematics 225. This course presents the principles and applications of heat, electricity, magnetism, and optics. Emphasis is on fundamental concepts, problem solving, notation and units. The laboratory includes a one-hour problem session. Laboratory fee.

PHYSICS (PHY) 203 (4)
INTRODUCTION TO MODERN PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Physics 202. The principles of relativity, atomic physics, and nuclear physics are covered. Emphasis is on basic concepts, problem-solving, notation, and units. Laboratory fee.

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.

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) 102 (3)
CONTEMPORARY RELIGIOUS PROBLEMS (3 LEC.)

Both classic and recent issues are explored. Such topics as the nature of religion, the existance of God, world religions, mysticism, sexuality and religion, and the interpretation of death are included. This course may be offered with emphasis on a specific topic, such as death and dying.

RELIGION (REL) 201 (3)
MAJOR WORLD RELIGIONS (3 LEC)

This course surveys the major world religions. Hinduism, Buddhism, Judaism, Islam, and Christianity are included. The history of religions is covered, but the major emphasis is on current beliefs. Other topics may also be included, such as the nature of religion, tribal religion, and alternatives to religion.

SOCIAL SCIENCE (SS) 131 (3)
AMERICAN CIVILIZATION (3 LEC.)

Theories and institutions of modern society are introduced. Psychological, historical, sociocultural, political, and economic factors are considered. The nature of the human being and the relationships of the individual are examined. Emphasis is on the national, state, and local experiences which affect daily life.

SOCIAL SCIENCES (SS) 132 (3)
AMERICAN CIVILIZATION (3 LEC)

Prerequisite: Social Science 131. Topical studies are made of the theories and institutions of modern society.Psychological, historical, sociocultural, political, and economic factors are all considered. Emphasis is on analyzing and applying theory to life experiences.

SOCIOLOGY (SOC) 101 (3)
INTRODUCTION TO SOCIOLOGY (3 LEC.)

This course is a study of the nature of society and the foundations of group life. Topics include institutions, social change, processes, and problems.

SOCIOLOGY (SOC) 102 (3)
SOCIAL PROBLEMS (3 LEC.)

This course is a study of social problems which typically include: crime, poverty, minorities, deviancy, population, and health care. Specific topics may vary from semester to semester to address contemporary concerns.

SOCIOLOGY (SOC) 103 (3)
HUMAN SEXUALITY (3 LEC.)

Students may register for either Psychology 103 or Sociology 103 but recieve credit for only one of the two. Topics include physiological, psychological, and sociological aspects of human sexuality.

SOCIOLOGY (SOC) 203 (3)
MARRIAGE AND FAMILY (3 LEC.)

Prerequisite: Sociology 101 recommended. Courtship patterns and marriage are analyzed. Family forms, relationships, and functions are included. Sociocultural differences in family behavior are also included.

SOCIOLOGY (SOC) 204 (3)
AMERICAN MINORITIES (3 LEC)

Prerequisite: Sociology 101 or 6 hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one. The principal minority groups in American society are the focus of this course. The sociological significance and historic contributions of the groups are presented. Emphasis is on current problems of intergroup relations, social movements, and related social changes.

SOCIOLOGY (SOC) 205 (3)
INTRODUCTION TO SOCIAL RESEARCH (3 LEC.)

Prerequisite: Sociology 101, Developmental Mathematics 091, or the equivalent. Principles and procedures in social research are presented. Topics include sources of data, techniques of collection, analysis, and statistical description.

SOCIOLOGY (SOC) 206 (3)
INTRODUCTION TO SOCIAL WORK (3 LEC.)

The development of the field of social work is studied. Topics include the techniques of social work and the requirements for training in social work.

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.

SOCIOLOGY (SOC) 210 (3)
FIELD STUDIES IN AMERICAN MINORITIES (3 LEC.)

Prerequisite: Sociology 101 or Sociology 204. Experience is provided in Indian, Black, and Mexican-American community centers. Work is under professional supervision in a task-oriented setting.

SOCIOLOGY (SOC) 231 (3)
URBAN SOCIAL PROBLEMS (3 LEC.)

The sociology of social institutions is studied. Topics include urbanization, theories of formation, and the impact of urbanization on the individual.

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.

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) 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.

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 pre-

formance 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) 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.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 140 (3)
INTRODUCTION TO DEAFNESS (3 LEC., 1 LAB.)

The psychology and history of educating the deaf are introduced. Emphasis is on the psychological, social, emotional, and occupational aspects of deafness.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 141 (4)
BEGINNING SIGN LANGUAGE (3 LEC., 2 LAB.)

Prerequisite: Majors in Training Paraprofessionals for the Deaf should enroll concurrently in Training Paraprofessionals for the Deaf 142. Sign language and fingerspelling are introduced. Practice and experience in developing expressive and receptive skills are provided. Emphasis is on mastering expressive skills. Laboratory fee.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 142 (3)
COMMUNICATION THEORY (3 LEC.)

Basic communication methods used by the deaf are explored. Emphasis is on the interrelationship of all language methods and the concept of total communication, including theories, ideas, methods of language, communication, and English. (This course is not a sign language course.)

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 143 (4)
INTERMEDIATE SIGN LANGUAGE (3 LEC., 2 LAB.)

Prerequisite: Training Paraprofessionals for the Deaf 141 for Training Paraprofessionals for the Deaf majors and Training Paraprofessionals for the Deaf 142 for all students. Receptive and expressive fingerspelling skills are increased. Basic vocabulary is expanded, and idioms are introduced. Emphasis is on mastering receptive skills. Laboratory fee.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 145 (3)
CLASSROOM MANAGEMENT (2 LEC., 2 LAB.)

Prerequisite: Training Paraprofessionals for the Deaf 140. Techniques of effective classroom management are studied for nursery, elementary, and secondary school. Emphasis is on interpersonal relationships, team-teaching, and behavior management. The role of the teacher aide and the teacher aide/interpreter in the school setting is defined.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 146 (2)
THE DEAF ADULT (2 LEC.)

Prerequisite: Training Paraprofessionals for the Deaf 140. This course focuses on techniques to develop the social and work behaviors of the deaf. Experiences are provided in working with adult deaf in group interaction and in developing business and social skills.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 147 (3)
LANGUAGE DEVELOPMENT OF THE DEAF (3 LEC.)

The language development of deaf persons is studied. The period from

infancy to adulthood is included. The importance of family, community, and school relationships is stressed. Various methods and materials used in developing language are presented. An overview of learning theory and normal language acquisition is also included.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 148 (1)
RECEPTIVE FINGERSPELLING (2 LAB.)

Prerequisites: Training Paraprofessionals for the Deaf 141, 143, or concurrent enrollment in Training Paraprofessionals for the Deaf 240. This course increases the student's ability to read fingerspelling. Video tapes are used to demonstrate fingerspelling — starting with two-letter words and progressing to words of several syllables. These words are presented individually as well as in sentences.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 230 (4)
ETHICS AND SPECIFICS OF INTERPRETING (3 LEC., 2 LAB.)

Prerequisite: Training Paraprofessionals for the Deaf 141 or the consent of the instructor. This class focuses on interpreter protocol, i.e., manner of dress, code of ethics, language level. The student will learn about the preparation and training to become an interpreter for the deaf in different settings. Examples of these settings are legal, religious, vocational, medical, educational, counseling and rehabilitation.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 240 (4)
ADVANCED SIGN LANGUAGE (3 LEC., 2 LAB.)

Prerequisites: Training Paraprofessionals for the Deaf 141, 142, and 143. This course is a continuation of training in sign language. Practical experiences are included. Increased ability in both receptive and expressive areas is developed. The ability to move from one kind of sign language to another kind is stressed, and emphasis is on mastering Ameslan. Laboratory fee.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 241 (4)
AUDIOMETRY (3 LEC., 2 LAB.)

Prerequisite: 15 to 20 hours of Training Paraprofessionals for the Deaf courses or the consent of the instructor. A study of the uses of auditory equipment with the deaf in all situations. Includes instruction combined with practicum experiences in utilization of various types of group and individual auditory equipment. Training in techniques of utilization of equipment and materials to enable the deaf to respond meaningfully to their environments via the auditory channel.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 242 (3)
MEDIA FOR THE DEAF (2 LEC., 2 LAB.)

All types of media are surveyed. Emphasis is on specialized uses in a classroom for the deaf and on media production. Practice is provided in the use and maintenance of all media.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 247 (3)
SPECIAL PROBLEMS IN DEAFNESS (3 LEC.)

Prerequisite: The consent of the instructor. Various topics are studied as demand warrants. Examples include residential care, introduction to rehabilitation, and the deaf/blind. This course may be repeated for credit when topics vary.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 248 (3)
REHABILITATION OF THE MULTIPLY HANDICAPPED DEAF (3 LEC., 1 LAB.)

Prerequisite: Training Paraprofessionals for the Deaf 140. An overview of other handicapping conditions accompanying deafness. Emphasis on problems of development and education and on severity of vocational problems when deafness is one of the handicaps. Techniques of management and instruction are included. Instructional personnel will include guest professionals from areas of all handicaps.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 250 (3)
REVERSE INTERPRETING (3 LEC.)

Prerequisite: Training Paraprofessionals for the Deaf 240. This course is designed for the advanced sign language student. Reverse skills are developed and practiced through the use of video tapes (ranging from manual English to Ameslan), audio tapes and live subjects.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TDP) 251 (4)
EDUCATIONALSPECIALIZED SIGNS (3 LEC., 2 LAB.)

Prerequisites: Training Paraprofessionals for the Deaf 141, 142, 143 and 240. This course provides students with knowledge of specialized signs, particularly educational signs. Other contents covered are medical, sexual, legal, drug related and religious. Additional content areas are explored as needed. Laboratory fee.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 802 (2)
(See Cooperative Work Experience)

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 803 (3)
(See Cooperative Work Experience)

TRANSPORTATION TECHNOLOGY (TRT) 144 (3)
INTRODUCTION TO TRANSPORTATION (3 LEC.)

This course is an overview of specialized fields within the transportation industry. The role of transportation in modern society is identified. Other topics include community needs, the philosophy of transportation, and the future of transportation.

TRANSPORTATION TECHNOLOGY (TRT) 145 (3)
INTRODUCTION TO RATES AND TARIFFS (3 LEC.)

Special emphasis is placed on present-day transportation modes, carrier pricing systems documentation, and federal and state regulation policies.

TRANSPORTATION TECHNOLOGY (TRT) 146 (3)
TRANSPORTATION AND TRAFFIC MANAGEMENT (3 LEC.)

This course is for students majoring in transportation technology. It emphasizes current transportation methods. Included are carrier services, carrier pricing systems, documentation, carrier liability, claims, import and export procedures, and governmental regulations. The course is designed to prepare students to take the certification examinations of the American Society of Traffic and Transportation.

TRANSPORTATION TECHNOLOGY (TRT) 147 (3)
ECONOMICS OF TRANSPORTATION (3 LEC.)

Prerequisite: Transportation Technology 146. The economic significance of transportation is studied. Topics include the rationale of pricing, the economics of regulation, subsidies and coordination, and interagency control. This course is designed to prepare students to take the certification examinations of the American Society of Traffic and Transportation.

TRANSPORTATION TECHNOLOGY (TRT) 148 (3)
GOVERNMENT POLICIES IN TRANSPORTATION (3 LEC.)

Federal, state, and local government roles and policies in transportation are explored. Included are policy making, subsidy, taxation, and controls.

TRANSPORTATION TECHNOLOGY (TRT) 240 (3)
INTERSTATE COMMERCE LAW I (3 LEC.)

Prerequisite: Transportation Technology 147. Principles of transportation regulation are studied. Topics include the framework of regulation, regulatory acts, and administrative agencies. The regulatory policies of the Interstate

Commerce Commission, the Civil Aeronautics Board, and the Federal Maritime Commission are also included. This course is designed to prepare students to take the certifying examinations of the American Society of Traffic and Transportation and the Interstate Commerce Commission.

TRANSPORTATION TECHNOLOGY (TRT) 241 (3)
INTERSTATE COMMERCE LAW II(3 LEC.)

Prerequisite: Transportation Technology 240. Rules and regulations covering the practice and procedure of federal agencies are studied. The agencies include the Interstate Commerce Commission, the Civil Aeronautics Board, and the Federal Maritime Administration. Pleadings, rules of evidence, rules of ethics, and judicial review are covered. This course is designed to prepare students to take the certifying examinations of the American Society of Traffic and Transportation and the Interstate Commerce Commission.

TRANSPORTATION TECHNOLOGY (TRT) 249 (3)
APPLIED RATES AND TARIFFS (3 LEC.)

Prerequisite: Transportation Technology 145. This course is an analytical study of transportation pricing structures. Special emphasis is given to the methodology for construction of carrier tariffs, the development of freight rates, and special services provided by carriers. This course is designed to develop skills leading to certification examinations of The American Society of Traffic and Transportation.

TRANSPORTATION TECHNOLOGY (TRT) 250 (1)
STUDIES IN TRANSPORTATION TECHNOLOGY (1 LEC.)

This course provides the student an opportunity to explore selected topics in the field of transportation. The course may be repeated with a different emphasis for a maximum of nine hours of credit.

TRANSPORTATION TECHNOLOGY (TRT) 287 (3)
PHYSICAL DISTRIBUTION MANAGEMENT I (3 LEC.)

The management and organization of physical distribution are studied. Emphasis is on decision-making in inventory control, warehousing, packaging, and material handling. The analysis of location and international distribution and transport systems are also covered.

TRANSPORTATION TECHNOLOGY (TRT) 288 (3)
PHYSICAL DISTRIBUTION MANAGEMENT II (3 LEC.)

Relationships in the management of physical distribution and the market are studied. Topics include market environment, distribution channels and systems, cost planning and analysis, financial control, and system design.

TRANSPORTATION TECHNOLOGY (TRT) 713, 803, 813 (3)
(See Cooperative Work Experience)

VOCATIONAL NURSING (VN) 144 (3)
HEALTH MAINTENANCE THROUGH THE LIFE CYCLE (3 LEC.)

Prerequisite: Admission to the Vocational Nursing Program. This course presents the concepts necessary for general health maintenance including normal growth and development; geriatrics, normal nutrition for all ages; mental health principles; and the prevention and control of disease.

VOCATIONAL NURSING (VN) 145 (3)
NURSING PROCESS I (3 LEC.)

Prerequisite: Admission to the Vocational Nursing Program. Nursing process provides the basic concepts that serve as the foundation for other nursing courses. It includes an introduction to the health care delivery system, nursing as a profession, the nursing process, and communication techniques. The course focuses on meeting the basic physical and psychological needs of patients. A Calculation-Conversion Proficiency Test is a required component of the course.

VOCATIONAL NURSING (VN) 150 (8)
CLINICAL II (28 LAB.)

Prerequisite: Completion of Vocational Nursing 147, 148 with a grade of "C" or better. Must be concurrently enrolled in Vocational Nursing 149. This course provides the opportunity for students to use the nursing process and clinical skills to meet the needs of patients experiencing medical, surgical or emotional problems. Supervised practice in the administration of medications is included.

VOCATIONAL NURSING (VN) 152 (6)
NURSING PRACTICE (24 LAB.)

Prerequisite: Admission to the Vocational Nursing Program. This course emphasizes the scientific principles and nursing competency in nursing skills in simulated laboratory situations that prepare the student to meet the basic needs of patients in clinical situations. Selected clinical experiences enable the student to assess, plan, implement, and evaluate nursing care. Laboratory fee.

VOCATIONAL NURSING (VN) 153 (8)
MATERNAL CHILD HEALTH (7 LEC., 3 LAB.)

Prerequisite: Completion of Vocational Nursing 144, 145, 146 and all support courses with grade of "C" or better. This course focuses on the theory, principles and nursing skills related to meeting the basic needs of maternity, newborn, and pediatric patients. Laboratory fee.

VOCATIONAL NURSING (VN) 154 (7)
MATERNAL CHILD HEALTH CLINICAL (28 LAB.)

Prerequisites: Completion of Vocational Nursing 144, 145, 146 and all support courses with grade of "C" or better. Must be concurrently enrolled in Vocational Nursing 147. This course provides clinical experiences focusing on normal prenatal, labor and delivery, post partum, and newborn nursing care situations. Students also have the opportunity to apply the nursing process to the care of pediatric patients with acute or chronic problems. Laboratory fee.

VOCATIONAL NURSING (VN) 155 (10)
NURSING PROCESS II (8 LEC., 4 LAB.)

Prerequisites: Completion of Vocational Nursing 147, 148 with grade of "C" or better. This course focuses on the nursing care of patients with various medical, surgical or emotional problems. Drug and diet therapy and clinical skills used in caring for acutely or chronically ill patients are included. The topic of professional and vocational adjustment to the employee role is included. Laboratory fee.

WELDING (WE) 101 (3)
BASIC WELDING AND CUTTING PRACTICES (1 LEC., 5 LAB.)

This course is for students who need welding on the job, such as in auto body, auto mechanics, or air conditioning. Emphasis is on setting up and using oxyfuel equipment. Cutting up to and including ⅜" mild steel, welding up to and including ⅛" mild steel, and brazing up to and including 16 ga. mild steel are all included. Setting up and using arc welding equipment are also included. Welding ¼" through ⅜" mild steel in the flat and vertical position using E60's series electrodes is covered. Laboratory fee

WELDING (WE) 111 (2)
OXYFUEL I (60 CONTACT HOURS)

This course gives both theory and practice in basic tools, equipment and processes used in welding and brazing guage materials. Lab work

includes preparation and performance of welded and brazed joints. Laboratory fee.

WELDING (WE) 112 (2)
OXYFUEL II (60 CONTACT HOURS)
Prerequisite: Welding 111. This course gives both theory and practice in the basic tools, equipment and procedures used in layout, cutting, shaping, forming and the heat treating of metals. Lab work includes the selection and use of fuel gases for heat treating and the set-up and usage of semi-automatic and manual cutting equipment. Laboratory fee.

WELDING (WE) 113 (2)
SHIELDED METAL ARC WELDING I (60 CONTACT HOURS)
This course gives both theory and practice in the identification and usage of shielded metal arc welding electrodes. Laboratory work includes the use of E60 and E70 series including low hydrogen electrodes primarily in the flat and horizontal position. Laboratory fee.

WELDING (WE) 114 (2)
SHIELDED METAL ARC WELDING II (60 CONTACT HOURS)
Prerequisite: Welding 113. This course includes both theory and laboratory work, emphasizing the production and properties of mild steel alloys. Arc welding equipment set-up and operation are also included. Laboratory work will include the use of E60 and E70 series electrodes primarily in the vertical and overhead position. Laboratory fee.

WELDING (WE) 115 (4)
SHIELDED METAL ARC WELDING III (120 CONTACT HOURS)
Prerequisite: Welding 114. This course gives both the theory and practice in code quality welding. Laboratory work includes passing standard test according to the American Welding Society and American Society of Mechanical Engineers for certifying procedures for 316" - 34" thickness range material in all positions. Laboratory fee.

WELDING (WE) 116 (4)
SHIELDED METAL ARC WELDING IV (120 CONTACT HOURS)
Prerequisite: Welding 115. This course is designed to introduce the basis of shielded metal arc welding of pipe. Lab work includes welding 3" through 10" schedule 40 mild steel pipe. The vertical, horizontal rolled and fixed using E60 and E70 series electrodes are included. Laboratory fee.

WELDING (WE) 117 (3)
GENERAL METAL LAYOUT (90 CONTACT HOURS)
Prerequisite: Drafting 182 or equivilent. This course gives both theory and practice in blueprint reading, welding symbols, layout work and fabrication techniques of metal weldments. Lab work consists of developing shop drawings and fabrication of designed structures. Laboratory fee.

WELDING (WE) 118 (4)
WELDING INSPECTION AND QUALITY CONTROL (120 CONTACT HOURS)
Prerequisites: Welding 117 and six credit hours of welding lab courses or equivilent. This course is both a theory and practical application of welding codes, processes, testing procedures, testing equipment and weld discontinuities. Lab work emphasis is on inspection and qualification of welds and welding procedures.

WELDING (WE) 211 (2)
GAS TUNGSTEN ARC WELDING I (60 CONTACT HOURS)
This course gives both theory and practice in the set-up and use of gas-tungsten arc welding of plate. Laboratory work will include setting up and using 18 gauge through 38" thick mild steel, stainless and aluminum. Welds will be made primarily in the flat and horizontal positions. Laboratory fee.

WELDING (WE) 212 (2)
GAS TUNGSTEN ARC WELDING II (60 CONTACT HOURS)
Prerequisite: Welding 211 or equivilent. This course gives both theory and practice in the set-up and use of gas tungsten arc welding of pipe. Lab work includes the welding of thin wall tubing and schedule 40 pipe. Welding is primarily in the vertical, horizontal rolled and horizontal fixed positions. Laboratory fee.

WELDING (WE) 213 (4)
GAS TUNGSTEN ARC WELDING III (120 CONTACT HOURS)
Prerequisite: Welding 212 or equivilent. This is an advanced theory and skills course in the use of gas tungsten arc welding of plate and pipe. Lab work will include passing the standard qualification test in a variety of metals in all positions. Laboratory fee.

WELDING (WE) 214 (2)
GAS METAL ARC WELDING I (60 CONTACT HOURS)
This course gives both theory and practice in the set-up and use of gas metal arc welding processes of plate. Lab work will be on setting up and using gas metal arc welding equipment in welding 18 guage 38" thick mild steel, stainless and aluminum, primarily in the flat and horizontal position. Laboratory fee.

WELDING (WE) 215 (2)
GAS METAL ARC WELDING II (60 CONTACT HOURS)
Prerequisite: Welding 214. This course gives both theory and practice in the set-up and use of gas metal arc welding processes of pipe. Lab work includes the welding of schedule 40 mild steel pipe in the vertical, horizontal rolled and fixed positions. Laboratory fee.

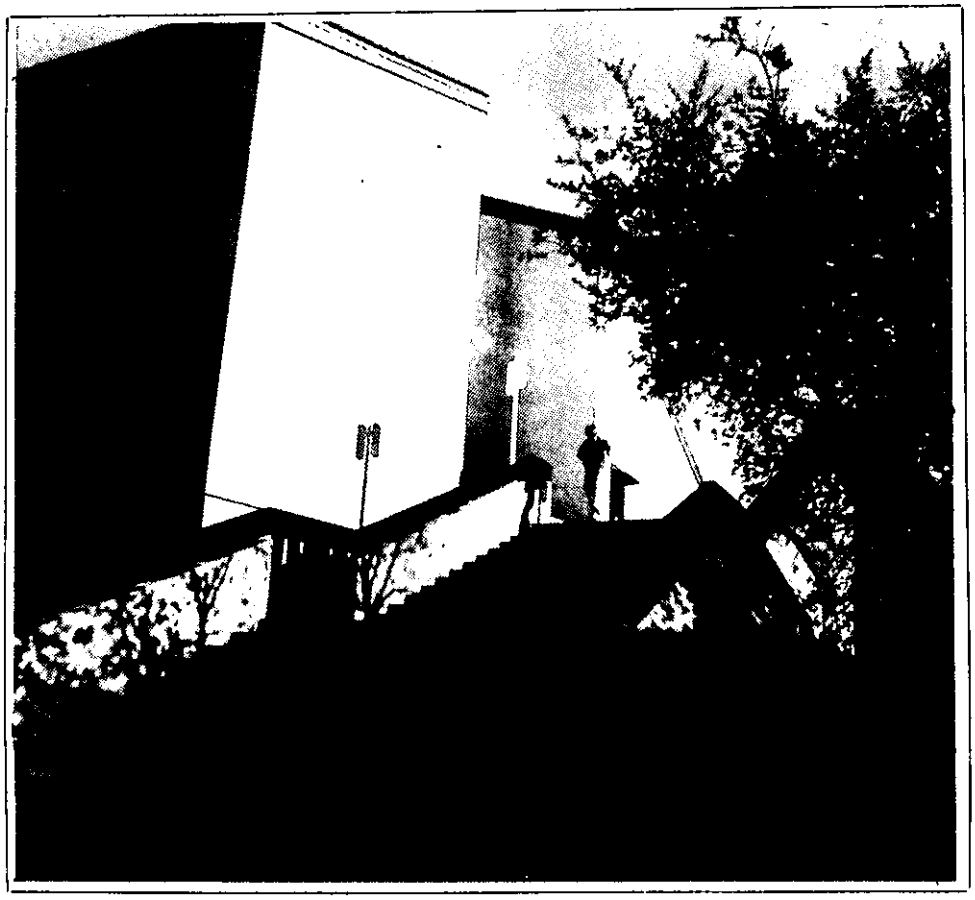
WELDING (WE) 216 (4)
GAS METAL ARC WELDING III (120 CONTACT HOURS)
Prerequisite: Welding 215. This is an advanced theory and skills course in the use of gas metal arc welding of plate and pipe. Lab work will be on passing the standard qualification test in plate and pipe on plate and pipe in a variety of metals and thickness ranges in all positions. Laboratory fee.

WELDING (WE) 217 (3)
BASIC WELDING METALLURGY (90 CONTACT HOURS)
This is a theory type course designed to assist those students in welding and related industries to refresh and extend their knowledge of the behavior of the various fabricating metals during welding. The effects of the joining processes and procedures on the fabrication and service performance of weldments are also considered. Laboratory fee.

WELDING (WE) 218 (3)
APPLIED WELDING METALLURGY (90 CONTACT HOURS)
Prerequisite: Welding 217 and six credit hours of welding lab courses. This course is designed to assist the student in improving communication skills with welding engineers and metallurgists. The course includes a study of welding processes and their relationship to and effect upon metals and why they can or cannot be used for certain applications; the theory of heat treating and its many uses; the value of preheat, interpass temperature; and post-heat in welding procedures. This course should increase the students knowledge of what metals are made of and why they are used for specific industrial applications; to strengthen the knowledge and understanding of the grain structure of metals and the effect that welding processes have on them. Laboratory fee.

WELDING (WE) 219 (3)
WELDING DESIGN (90 CONTACT HOURS)
Prerequisites: Welding 117, and six credit hours of welding lab courses or equivilent. Concepts in designing products for welding, joint design and selection, weld size determination, welding costs, codes and applications in welding. A design project is chosen and carried to completion using the design team concept. Laboratory fee.

WELDING (WE) 220 (2)
SPECIAL WELDING APPLICATION I (60 CONTACT HOURS)
This is an advanced skills development course designed to allow the student to program his own specialization area course objectives under instructional supervision. This will allow a student to upgrade his present skills development level in order to meet employment reclassification requirements of a selected potential employer. This course is open only to those students in advanced standing or who are presently employed and in need of additional skill development. This course may be repeated for credit. Laboratory fee.



RECIPROCAL TUITION AGREEMENT

DCCCD PROGRAMS
The following programs offered by Dallas County Community College District may be taken by Tarrant County residents at in-county tuition rates:

Program	Campus
Advertising Art	BHC
Animal Medical Technology	CVC
Apparel Design	ECC
Aviation Technology	MVC
Air Cargo	
Air Traffic Control	
Aircraft Dispatcher	
Airline Marketing	
Career Pilot	
Fixed Base Operations	
Avionics	MVC
Automotive Parts	BHC
Automotive Machinist	BHC
Building Trades	NLC
Carpentry	
Electrical	
Commercial Design & Advertising	CVC
Commercial Music	CVC
Construction Management	RLC
Diesel Mechanics	NLC
Distribution Technology	NLC
Engineering Technology	RLC
Food Service Operations	ECC
Graphic Communications	EFC
Horology	MVC
Hotel/Motel Operations	ECC
Human Services	EFC
Interior Design	ECC
Motorcycle Mechanics	CVC
Optical Technology	NLC
Outboard Marine Engine Mechanics	CVC
Pattern Design	ECC
Purchasing Management	EFC, NLC
Retail Management	BHC, CVC
Solar Energy Technology	NLC
Vocational Nursing	ECC

TCJC PROGRAMS
The following programs offered by Tarrant County Junior College may be taken by Dallas County residents at in-county tuition rates:

Program	Campus*
Agribusiness	NW
Cast Metals Technology	NE
Civil/Construction Technology	NE
Dental Hygiene	NE
Emergency Medical Technology	NE
Industrial Supervision	S
Long Term Health Care Administration	NE
Media Technology	NE
Medical Records Technology	NE
Nondestructive Evaluation Technology	S
Physical Therapist Assistant	NE
Property Tax Appraisal	NE
Radio-TV Repair	S

*NE — Northeast Campus, NW — Northwest Campus, S — South Campus.

Technical/Occupational Programs

ACCOUNTING ASSOCIATE

(Associate Degree)

The Accounting Associate two-year program is designed to prepare a student for a career as a junior accountant in business, industry and government. Emphasis will be placed on internal accounting procedures and generally accepted accounting principles.

The Associate in Applied Arts and Sciences Degree is awarded for successful completion of at least 63 credit hours as outlined below. Students desiring a less comprehensive program that emphasizes bookkeeping procedures and practices should consider the General Office Certificate with elective emphasis on accounting careers. The General Office Certificate is available in the Office Careers Program.

		CREDIT HOURS
SEMESTER I		
ACC 201	Principles of Accounting I	3
BUS 105	Introduction to Business	3
COM 131	Applied Composition and Speech or*	3
ENG 101	Composition and Expository Reading	
MTH 130	Business Mathematics or	3
MTH 111	Mathematics for Business and Economics	
OFC 160	Office Machines	3
		15
SEMESTER II		
ACC 202	Principles of Accounting II	3
COM 132	Applied Composition and Speech or*	3
ENG 102	Composition and Literature	
CS 175	Introduction to Computer Science	3
MGT 136	Principles of Management	3
‡ OFC 172	Beginning Typing	3
		15
SEMESTER III		
ACC 203	Intermediate Accounting I	3
ACC 204	Managerial Accounting	3
ECO 201	Principles of Economics I	3
GVT 201	American Government	3
† Electives		3-6
		15-18
SEMESTER IV		
ACC 238	Cost Accounting or	3
ACC 239	Income Tax Accounting	
BUS 234	Business Law	3
ECO 202	Principles of Economics II	3
OFC 231	Business Communications	3
† Electives		3-6
		15-18
Minimum Hours Required:		63

† Electives — A minimum of 9 credit hours must be selected from the following:

ACC 205	Business Finance	3
ACC 207	Intermediate Accounting II	3
ACC 238	Cost Accounting	3
ACC 239	Income Tax Accounting	3
ACC 703-713 803-813	Cooperative Work Experience	3
ACC 704-714 804-814	Cooperative Work Experience	4
BUS 143	Personal Finance	3
BUS 237	Organizational Behavior	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science and Data Processing	4
MGT 206	Principles of Marketing	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
SPE 105	Fundamentals of Public Speaking	3
Any CS or DP Programming course		

* ENG 101 and ENG 102 may be substituted for COM 131 and COM 132 provided that SPE 105 is also taken.

‡ Students who can demonstrate proficiency by previous training, experience, or placement tests may substitute a course from the electives listed for this program.

AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

(Associate Degree)

This program furnishes both the theory and practice required to qualify a person for employment in the various areas of the air conditioning and refrigeration industry.

		CREDIT HOURS
SEMESTER I		
ACR 111	Principles of Refrigeration	3
ACR 113	Fundamentals of Electricity	3
ACR 115	Unit Air Conditioning Systems	3
ACR 117	Domestic Refrigeration	3
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
DFT 182	Technician Drafting	2
		17
SEMESTER II		
ACR 112	Properties of Air	3
ACR 114	Heat Load Analysis	3
ACR 116	Summer Air Conditioning Systems	3
ACR 118	Winter Air Conditioning Systems	3
HST 101	History of the United States or	3
PSY 131	Human Relations	
MTH 195	Technical Mathematics	3
		18
SEMESTER III		
ACR 221	Refrigeration Loads	3
ACR 223	Medium Temperature Refrigeration Systems	3
ACR 227	Low Temperature Refrigeration Systems	3
ACR 229	Refrigeration Equipment Selection	3
ACC 131	Bookkeeping I	3
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
		18
SEMESTER IV		
ACR 222	Advanced Systems	3
ACR 224	System Testing and Balancing	3
ACR 228	Air Conditioning System Equipment Selection	3
ACR 230	Energy Conservation	3
ACR 803	Cooperative Work Experience	3
		15
Minimum Hours Required:		68

AIR CONDITIONING AND REFRIGERATION

(Certificate)

This program will qualify the student to install, repair, and maintain equipment in the fields of domestic refrigeration, commercial refrigeration, and air conditioning, cooling or heating systems.

		CREDIT HOURS
SEMESTER I		
ACR 111	Principles of Refrigeration	3
ACR 113	Fundamentals of Electricity	3
ACR 115	Unit Air Conditioning Systems	3
ACR 117	Domestic Refrigeration	3
MTH 195	Technical Mathematics	3
		15
SEMESTER II		
ACR 112	Properties of Air	3
ACR 114	Heat Load Analysis	3
ACR 116	Summer Air Conditioning Systems	3
ACR 118	Winter Air Conditioning Systems	3
		12
SEMESTER III		
ACR 221	Refrigeration Loads	3
ACR 223	Medium Temperature Refrigeration Systems	3
ACR 227	Low Temperature Refrigeration Systems	3
ACR 229	Refrigeration Equipment Selection	3
ACR 803	Cooperative Work Experience	3
		15
Minimum Hours Required:		42

AUTO BODY TECHNOLOGY

(Associate Degree)

This program introduces the student to all facets of auto body repair and painting. Emphasis is placed upon the development of the necessary skills and knowledge required to function successfully in this industry. The program of study includes technical aspects of metal behavior combined with correct repair and refinishing procedures.

		CREDIT HOURS
SEMESTER I		
AB 111	Basic Metal Principles*	3
AB 112	Applied Basic Metal Principles*	2
AB 121	Basic Paint Principles*	3
AB 122	Applied Basic Paint Principles*	2
AB 245	Welding for Auto Body or	3
WE 101	Basic Welding Principles	
MTH 195	Technical Mathematics	3
		16
SEMESTER II		
AB 113	Minor Metal Repair*	3
AB 114	Applied Minor Metal Repair*	2
AB 123	Paint Blending and Spot Repair Techniques*	3
AB 124	Applied Paint Blending and Spot Repair Techniques*	2
COM 131	Applied Composition and Speech	3
PHY 131	Applied Physics	4
		17
SEMESTER III		
AB 211	Major Panel Replacement*	3
AB 212	Applied Major Panel Replacement*	2
AB 213	Major Collision and Frame Repair	3
PSY 131	Human Relations	3
† Elective		4
		15
SEMESTER IV		
AB 139	Body Shop Operations	3
AB 221	Advanced Paint Techniques*	3
AB 222	Applied Advanced Paint Techniques*	2
AB 235	Estimating	3
AB 803	Cooperative Work Experience or	3
AB 804	Cooperative Work Experience	(4)
		14-15
Minimum Hours Required:		62

† Electives — Must be selected from the following:

AT 118	Electrical Systems	4
AT 221	Heating and Air Conditioning	4
AT 225	Front End	4

*Must be enrolled in concurrently (at the same time): AB 111/112, AB 113/114, AB 121/122, AB 123/124, AB 211/212, AB 221/222

AUTO BODY TECHNOLOGY

(Certificate)

This program is designed to train a student in all facets of auto body and repair and painting. Emphasis is placed upon those skills needed to train the student to become a successful auto body repair person. This program offers the student a certificate in Auto Body Technology upon successful completion of the program.

		CREDIT HOURS
SEMESTER I		
AB 111	Basic Metal Principles*	3
AB 112	Applied Basic Metal Principles*	2
AB 121	Basic Paint Principles*	3
AB 122	Applied Basic Paint Principles*	2
AB 123	Paint Blending and Spot Repair Techniques*	3
AB 124	Applied Paint Blending and Spot Repair Techniques*	2
AB 245	Welding for Auto Body or	3
WE 101	Basic Welding Principles	
		18
SEMESTER II		
AB 113	Minor Metal Repair*	3
AB 114	Applied Minor Metal Repair*	2
AB 211	Major Panel Replacement*	3
AB 212	Applied Major Panel Replacement*	2
AB 221	Advanced Paint Techniques*	3
AB 222	Applied Advanced Paint Techniques*	2
		15
SEMESTER III		
AB 139	Body Shop Operations	3
AB 213	Major Collision and Frame Repair	3
AB 235	Estimating	3
AB 803 or	Cooperative Work Experience	3
AB 804	Cooperative Work Experience	(4)
		12-13
Minimum Hours Required:		45

*Must be enrolled in concurrently (at the same time): AB 111/112, AB 113/114, AB 121/122, AB 123/124, AB 211/212, AB 221/222

AUTOMOTIVE TECHNOLOGY

(Associate Degree)

The purpose of this program is to prepare students for entry level employment as an automotive technician. This program of study will include theory, diagnosis, repair, overhaul and maintenance of automobiles. Emphasis is placed on operational theory, practical skills and accepted shop procedures.

		CREDIT HOURS
SEMESTER I		
AT 108	Minor Vehicle Services	4
AT 110	Engine Repair I	4
AT 112	Engine Repair II	4
COM 131	Applied Composition and Speech I	3
MTH 195	Technical Mathematics	3
		18
SEMESTER II		
AT 114	Engine Analysis and Tune-Up	4
AT 116	Fuel and Emission Systems	4
AT 118	Electrical Systems	4
PHY 131	Applied Physics	4
		16
SEMESTER III		
AT 221	Heating and Air Conditioning	4
AT 223	Brake Systems	4
AT 225	Front End Systems	4
† Elective		3-4
		15-16
SEMESTER IV		
AT 227	Standard Transmissions and Drive Trains	4
AT 229	Automatic Transmissions I	4
AT 231	Automatic Transmissions II	4
AT 703	Cooperative Work Experience or	3
AT 714	Cooperative Work Experience	(4)
‡ Elective		3
		18-19
Minimum Hours Required:		67

† Elective — Must be selected from the following:

AB 245	Welding for Auto Body	3
BUS 105	Introduction to Business	3
WE 101	Basic Welding and Cutting Practices	3
AT 803	Cooperative Work Experience or	3
AT 814	Cooperative Work Experience	(4)

‡ Elective — Must be selected from the following:

GVT 201	American Government	3
HD 105	Basic Processes of Interpersonal Relationship	3
HUM 101	Introduction to the Humanities	3
PSY 131	Human Relations	3

AUTOMOTIVE TECHNOLOGY

(Certificate)

The purpose of this program is to train persons for entry level positions in the field of Automotive Technology. A certificate is issued upon successful completion of the following listed courses.

		CREDIT HOURS
SEMESTER I		
AT 108	Minor Vehicle Services	4
AT 110	Engine Repair I	4
AT 112	Engine Repair II	4
		12
SEMESTER II		
AT 114	Engine Analysis and Tune-Up	4
AT 116	Fuel and Emission Systems	4
AT 118	Electrical Systems	4
		12
SEMESTER III		
AT 221	Heating and Air Conditioning	4
AT 223	Brake Systems	4
AT 225	Front End Systems	4
		12
SEMESTER IV		
AT 227	Standard Transmissions and Drive Trains	4
AT 229	Automatic Transmissions I	4
AT 231	Automatic Transmissions II	4
AT 703	Cooperative Work Experience or	3
AT 714	Cooperative Work Experience	(4)
		15-16
Minimum Hours Required:		51

CHILD DEVELOPMENT ASSOCIATE

(Associate Degree)

The Child Development program offers students an in-depth study of young children from birth to twelve years of age in conjunction with the Parent/Child Study Center that provides students day-to-day involvement with young children. The program is designed to enable students to provide an optimal learning and caring environment for children.

		CREDIT HOURS
SEMESTER I		
CD 135	Introduction to Early Childhood Programs and Services**	4
CD 140	Early Childhood Development, 0-3 Years**	3
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
SOC 101	Introduction to Sociology	3
† Elective		3-4
		16-17
SEMESTER II		
CD 137	Early Childhood Learning Environments, Activities and Materials**	4
CD 141	Early Childhood Development, 3-5 Years**	3
CD 812	Cooperative Work Experience or	2
CD 813	Cooperative Work Experience or	(3)
CD 814	Cooperative Work Experience	(4)
HD 106	Personal and Social Growth or	3
PSY 105	Introduction to Psychology	
HST 102	History of the United States	3
† Elective		3
		18-20
SEMESTER III		
CD 100	Directed Participation in Early Childhood Programs* or	4
CD 233	Directed Participation in Early Childhood Programs	
CD 239	Studies in Child Guidance**	3
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
GVT 201	American Government	3
† Elective		2-4
		15-17
SEMESTER IV		
CD 150	Nutrition, Health and Safety of the Young Child**	3
CD 200	Application of Child Development Learning Theories* or	4
CD 244	Application of Child Development Learning Theories	
HUM 101	Introduction to the Humanities	3
SOC 203	Marriage and the Family	3
† Electives		2-4
		15-17
Minimum Hours Required:		64

† Electives — Must be selected from the following:

CD 125	Infant and Toddler Learning Environments, Activities, and Materials	4
CD 127	Early Childhood Development, 5-12 Years	3
CD 203	Parents and the Child Caregiver/Teacher	3
CD 209	Early Childhood Development Special Projects	3
CD 236	The Special Child: Growth and Development	3
CD 238	Introduction to Administration of Child-Care Programs	3
CD 246	Advanced Administrative Practices for Child-Care Facilities	3
CD 250	Supportive Services for Exceptional Children	3
CD 251	Learning Programs for Children with Special Needs	3
CD 253	Abuse Within the Family	3
CD 812	Cooperative Work Experience or	2
CD 813	Cooperative Work Experience or	3
CD 814	Cooperative Work Experience	4
TPD 141	Beginning Sign Language	4

* CD 100 and CD 200 are taken as one-hour courses concurrently with the six (6) required CD courses (**) and two (2) of the following CD electives: CD 125, CD 127, CD 203, CD 238, or CD 246

CD 100 and CD 200 are repeated for credit for a total of eight (8) hours and are *equivalent to CD 233 and CD 244*

CHILD DEVELOPMENT — SPECIAL CHILD CERTIFICATE

(Certificate)

This certificate program is planned to emphasize the needs of special children and their families.

		CREDIT HOURS
SEMESTER I		
CD 140	Early Childhood Development, 0-3 Years	3
CD 150	Nutrition, Health and Safety of the Young Child	3
CD 236	The Special Child: Growth and Development	3
CD 239	Studies in Child Guidance	3
HD 106	Personal and Social Growth	3
		15
SEMESTER II		
CD 141	Early Childhood Development, 3-5 Years	3
CD 250	Supportive Services for Exceptional Children	3
CD 251	Learning Programs for Children with Special Needs	4
CD 812	Cooperative Work Experience or	2
CD 813	Cooperative Work Experience or	(3)
CD 814	Cooperative Work Experience	(4)
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
† Elective		3-4
		18-21
Minimum Hours Required:		33

† Elective — Must be selected from the following:

CD 125	Infant and Toddler Learning Environments, Activities, and Materials	4
CD 127	Early Childhood Development, 5-12 Years	3
CD 253	Abuse Within the Family	3
TPD 141	Beginning Sign Language	4

CDA TRAINING CERTIFICATE

(Certificate)

This certificate program provides course work to assist the student to prepare for the CDA (Child Development Associate) assessment process. Students interested in applying for this national credential should consult a Child Development Instructor.

		CREDIT HOURS
SEMESTER I		
CD 135	Introduction to Early Childhood Programs and Services	4
CD 140	Early Childhood Development, 0-3 Years	3
CD 150	Nutrition, Health and Safety of the Young Child	3
CD 239	Studies in Child Guidance	3
HD 106	Personal and Social Growth	3
† Elective		3-4
		19-20
SEMESTER II		
CD 137	Early Childhood Learning Environments, Activities, and Materials	4
CD 141	Early Childhood Development, 3-5 Years	3
CD 812	Cooperative Work Experience or	2
CD 813	Cooperative Work Experience or	(3)
CD814	Cooperative Work Experience	(4)
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
† Elective		3-4
† Elective		3-4
		18-22
Minimum Hours Required:		37

† Electives — Must be selected from the following:

CD 125	Infant and Toddler Learning Environments, Activities, and Materials	4
CD 203	Parents and the Child Caregiver/Teacher	3
CD 209	Early Childhood Development Special Projects	3
CD 236	The Special Child: Growth and Development	3
CD 238	Introduction to Administration of Child-Care Programs	3
CD 246	Advanced Administrative Practices for Child-Care Facilities	3
CD 250	Supportive Services for Exceptional Children	3
CD 251	Learning Programs for Children with Special Needs	4
CD 253	Abuse Within the Family	3
TPD 141	Beginning Sign Language	4

DATA PROCESSING PROGRAMMER

(Associate Degree)

This curriculum is intended for the preparation of entry-level or trainee computer programmers who will work in an applications setting to support the general, administrative, and organizational information processing function of industry, commerce, business and government service. It is designed as a two-year career program to prepare students for jobs. Graduates should be able to work in conjunction with a systems analyst in the programming environment usually found in a medium to large job shop. It is intended to provide a sufficient foundation so that graduates with experience and continued learning may advance in career paths appropriate to their own particular interests and abilities.

		CREDIT HOURS
SEMESTER I		
CS 175	Introduction to Computer Science	3
BUS 105	Introduction to Business or	3
MGT 136	Principles of Management	
DP 137	Data Processing Mathematics or any business math*	3
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
ACC 201	Principles of Accounting I**	3
		15
SEMESTER II		
DP 133	Beginning Programming (COBOL)	4
DP 138	Systems Analysis and Data Processing Logic	3
ECO 201	Principles of Economics I or	3
ECO 202	Principles of Economics II	
ACC 202	Principles of Accounting II	3
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
		16
SEMESTER III		
DP 136	Intermediate Programming (COBOL)	4
DP 142	RPG Programming or	3
DP 244	Basic Programming	
DP 233	Operating Systems and Communications	4
ACC 203	Intermediate Accounting or	3
ACC 238	Cost Accounting	
† Elective		3-4
		17-18
SEMESTER IV		
DP 231	Advanced Programming (ALC)	4
DP 232	Applied Systems	4
DP 236	Advanced COBOL Techniques or other 200 level DP or CS course	3-4
Any approved DP or CS course		3-4
		14-16
Minimum Hours Required:		62

† Electives — Must be selected from the following:
Any DP or CS course (including DP 700-800 Cooperative Work Experience)

DP 129	Data Entry Concepts	4
MGT 136	Principles of Management	3
MGT 206	Principles of Marketing	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
ECO 202	Principles of Economics II	3
MTH 202	Introductory Statistics	3
ENG 210	Technical Writing	3
BUS 105	Introduction to Business	3
ECO 201	Principles of Economics I	3

* MTH 111, MTH 112, MTH 130 or an equivalent business math course
** ACC 131 — Bookkeeping I, and ACC 132 — Bookkeeping II may be substituted for ACC 201 — Principles of Accounting

NOTE: Students may obtain credit toward a degree or certificate for only one of each of the pairs of courses listed below:
DP 133 or CS 184
DP 231 or CS 186
DP 244 or CS 182
CS 175 or CS 174

DIGITAL ELECTRONICS TECHNOLOGY

(Associate Degree)

This curriculum is designed to prepare a graduate to work as a technician on devices that require digital circuits such as computers, test equipment, automatic control units and central distribution systems. The student will learn schematic interpretation, test equipment usage and technical communications.

		CREDIT HOURS
SEMESTER I		
ET 190	D.C. Circuits and Electrical Measurements	4
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
DFT 182	Technical Drafting*	2
MTH 195	Technical Mathematics**	3
‡ Technical Elective(s)		4
		16
SEMESTER II		
ET 191	A.C. Circuits	4
ET 192	Digital Computer Principles	3
ET 193	Active Devices	4
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
MTH 196	Technical Mathematics**	3
		17
SEMESTER III		
ET 260	Sinusoidal Circuits	4
ET 261	Pulse and Switching Circuits	4
ET 263	Digital Computer Theory	4
‡ Technical Elective(s)		4
		16
SEMESTER IV		
ET 264	Digital Systems	4
ET 265	Digital Research	3
ET 266	Computer Applications	4
ET 267	Microprocessors	4
		15
Minimum Hours Required		64

‡ Electives — Must be selected from the following:

ET 194	Instrumentation	3
ET 238	Linear Integrated Circuits	4
ET 268	Advanced Microprocessors	4
ET 704	Cooperative Work Experience	4
ET 713	Cooperative Work Experience	3
ET 802	Cooperative Work Experience	2
CHM 101	General Chemistry	4
CS 175	Introduction to Computer Science	3
EGR 101	Engineering Analysis	2
EGR 186	Manufacturing Processes	2
EGR 204	Electrical Systems Analysis	3
CS 181	Introduction to Fortran Programming	3
PHY 111	Introduction to General Physics	4
PHY 131	Applied Physics	4

* DFT 184, DFT 231, or EGR 105 may be substituted.
**MTH 101 and MTH 104 may be substituted for MTH 195. MTH 105, MTH 121, MTH 124, MTH 225, MTH 226 may be substituted for either MTH 195 or MTH 196.

DRAFTING AND DESIGN TECHNOLOGY — ELECTRONIC DESIGN OPTION

(Associate Degree)

This option prepares the student for employment as a drafter or engineering aide in a wide range of electronic industries. Information in related fields is provided to enable the student to work effectively with the engineer and professional staff. Enrollment in Drafting Cooperative Work Experience Courses (Co-op) provides on-the-job experience while in the program

		CREDIT HOURS
SEMESTER I		
DFT 160	Manufacturing Fundamentals or	2
EGR 186	Manufacturing Processes	
DFT 183	Basic Drafting	4
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
ET 190	D.C. Circuits and Electrical Measurements	4
MTH 195	Technical Mathematics or	3
MTH 101	College Algebra	
		16
SEMESTER II		
DFT 231	Electronic Drafting	3
DFT 240	Printed Circuit Design	3
DFT 245	Computer Aided Design or	3
GA 134	Basic Camera Operations	
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
MTH 196	Technical Mathematics or	3
MTH 102	Plane Trigonometry	
		15
SEMESTER III		
DFT 241	Integrated Circuit Design	3
DFT 243	Advanced Printed Circuit Design	3
EGR 101	Engineering Analysis	2
EGR 106	Descriptive Geometry	3
ET 250	Principles of Electronic Integrated Circuits	4
		15
SEMESTER IV		
DFT 232	Technical Illustration	3
DFT 242	Advanced Integrated Circuit Design or	3
DFT 247	Applied Printed Circuit Design	
PSY 131	Human Relations	3
† Elective		3
‡ Technical Elective		3
		15
Minimum Hours Required:		61

†Elective — May be selected from the following:

CS 174	Fundamentals of Computing	3
ET 192	Digital Computer Principles	3

Drafting, Engineering, Graphic Arts and Cooperative Work Experience courses.

‡Technical elective may be selected from applied science, engineering, and cooperative work experience courses.

DRAFTING AND DESIGN TECHNOLOGY

(Associate Degree)

This program prepares the student for employment in a wide range of industries as a drafter or engineering aide. Information in related fields is provided to enable the student to work effectively with the engineer and professional staff. Enrollment in Drafting Cooperative Work Experience Courses (Co-op) provides on-the-job experience while in the program

		CREDIT HOURS
SEMESTER I		
DFT 183	Basic Drafting	4
DFT 135	Reproduction Processes	2
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
MTH 195	Technical Mathematics or	3
MTH 101	College Algebra	
‡ Technical Elective		3
		15
SEMESTER II		
DFT 160	Manufacturing Fundamentals	2
Drafting Course*		3-4
Drafting Course* or Co-op**		3
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
MTH 196	Technical Mathematics or	3
MTH 102	Plane Trigonometry	
		14-15
SEMESTER III		
Drafting Course*		3-4
EGR 106	Descriptive Geometry	3
‡ Technical Elective or Co-op**		3
GOV 201	American Government or	3
HST 101	History of the United States	
HD 105	Basic Processes of Interpersonal Relationships or	3
PSY 131	Human Relations	
		15-16
SEMESTER IV		
Drafting Course*		3
Drafting Course* or Co-op**		3
‡ Technical Elective		3
PHY 131	Applied Physics	4
GOV 202	American Government or	3
HST 102	History of the United States	
		16
Minimum Hours Required:		60

*Drafting Courses to be selected from the following:

DFT 136	Geological and Land Drafting	3
DFT 184	Intermediate Drafting	3
DFT 185	Architectural Drafting	4
DFT 230	Structural Drafting	3
DFT 231	Electronic Drafting	3
DFT 232	Technical Illustration	3
DFT 234	Advanced Technical Illustration	4
DFT 235	Building Equipment (Mechanical and Electrical)	3
DFT 236	Piping and Pressure Vessel Design	3
DFT 245	Computer Aided Design	3
DFT 250	Sheet Metal Design	3
DFT 251	Industrial Design	3

**Drafting Co-op Courses to be selected from the following:

DFT 703	Cooperative Work Experience	3
DFT 713	Cooperative Work Experience	3
DFT 803	Cooperative Work Experience	3
DFT 813	Cooperative Work Experience	3
DFT 704	Cooperative Work Experience	4
DFT 714	Cooperative Work Experience	4
DFT 804	Cooperative Work Experience	4
DFT 814	Cooperative Work Experience	4

‡ Technical Electives may be selected from Drafting, Applied Science or Engineering Technologies as approved by the Drafting Department

GRAPHIC COMMUNICATIONS

(Associate Degree)

The student's understanding of graphic processes is developed for employment in a commercial printing firm or a publication facility such as a newspaper or magazine. Students also learn production and management concepts and techniques useful in the field of graphic communications including photography and journalism.

		CREDIT HOURS
SEMESTER I		
GA 131	Graphic Processes	3
GA 140	Offset Printing	3
COM 131 / ENG 101	Applied Composition and Speech or Composition and Expository Reading	3
JN 101	Introduction to Mass Communications	3
OFC 172	Beginning Typing	3
		15
SEMESTER II		
GA 134	Basic Camera Operations	3
GA 136	Copy Preparation	3
COM 132 / SPE 105	Applied Composition and Speech or Fundamentals of Public Speaking	3
MTH 130	Business Mathematics	3
PHO 110	Introduction to Photography and Photo-Journalism	3
		15
SEMESTER III		
GA 206	Graphic Projects	3
GA 714	Cooperative Work Experience	4
JN 102	Introduction to Mass Communications	3
OFC 165	Introduction to Word Processing	3
PHO 120	Commercial Photography I	3
		16
SEMESTER IV		
GA 240	Offset Printing II	3
ACC 131 / ACC 201	Bookkeeping I or Principles of Accounting I	3
JN 103	News Gathering and Writing	3
PHO 121 / GA 814	Commercial Photography II or Cooperative Work Experience	4
PHO 207	Photography for Publications	3
		16
Minimum Hours Required:		62

GRAPHIC ARTS

(Certificate)

This certificate program provides the student with skill development opportunities in the field of Graphic Arts. Successful completion of this certificate program qualifies a person for employment in a commercial printing firm or in the printing division of a large company.

		CREDIT HOURS
SEMESTER I		
GA 131	Graphic Processes	3
GA 140	Offset Printing I	3
COM 131 / ENG 101	Applied Composition and Speech or Composition and Expository Reading	3
MTH 139	Applied Mathematics	3
OFC 172	Beginning Typing	3
		15
SEMESTER II		
GA 134	Basic Camera Operations	3
GA 136	Copy Preparation	3
COM 132 / SPE 105	Applied Composition and Speech or Fundamentals of Public Speaking	3
PSY 131	Human Relations	3
† Elective		3-4
		15-16
Minimum Hours Required:		30

†Elective — Must be selected from the following:

GA 714	Cooperative Work Experience	4
DFT 232	Technical Illustration	3
PHO 110	Introduction to Photography and Photo-Journalism.	3

MANAGEMENT CAREERS — MID-MANAGEMENT OPTION
(Associate Degree)

The Mid-Management option is a cooperative plan with members of the business community whereby the student attends college classes in management and related courses and concurrently works at a regular, paid, part-time or full-time job in a sponsoring business firm. To enter the Mid-Management option, students must make formal application and be interviewed by a member of the Mid-Management faculty before final acceptance will be granted.

		CREDIT HOURS
SEMESTER I		
MGT 136	Principles of Management	3
MGT 150	Management Training	4
MGT 154	Management Seminar: Role of Supervision	2
BUS 105	Introduction to Business	3
COM 131	Applied Composition and Speech*	3
		15
SEMESTER II		
MGT 151	Management Training	4
MGT 155	Management Seminar: Personnel Management	2
COM 132	Applied Composition and Speech*	3
CS 175	Introduction to Computer Science	3
HUM 101	Introduction to the Humanities	3
MTH 111	Mathematics for Business and Economics I or	3
MTH 112	Mathematics for Business and Economics II or	
MTH 130	Business Mathematics	
		18
SEMESTER III		
MGT 250	Management Training	4
MGT 254	Management Seminar: Organizational Development	2
ACC 201	Principles of Accounting I**	3
ECO 201	Principles of Economics I	3
PSY 131	Human Relations	3
		15
SEMESTER IV		
MGT 251	Management Training	4
MGT 255	Management Seminar: Business Strategy, the Decision Process and Problem Solving	2
ECO 202	Principles of Economics II	3
Social Science elective or Humanities elective		3
† Elective		3
		15
Minimum Hours Required:		63

† Elective — May be selected from the following:

MGT 137	Principles of Retailing	3
MGT 153	Small Business Management	3
MGT 212	Special Problems in Business	1
MGT 230	Salesmanship	3
MGT 233	Advertising and Sales Promotion	3
OFC 160	Office Machines	3
OFC 172	Beginning Typing	3

* Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.

** Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.

MANAGEMENT CAREERS — ADMINISTRATIVE MANAGEMENT OPTION
(Associate Degree)

The Administrative Management option offers a continuation of the traditional management and business studies. This option is designed for students seeking a detailed examination of management practices, techniques, and theories.

		CREDIT HOURS
SEMESTER I		
MGT 136	Principles of Management	3
BUS 105	Introduction to Business	3
COM 131	Applied Composition and Speech	3
HUM 101	Introduction to the Humanities	3
† Elective		3
		15
SEMESTER II		
MGT 206	Principles of Marketing	3
ACC 201	Principles of Accounting I*	3
COM 132	Applied Composition and Speech	3
CS 175	Introduction to Computer Science	3
MTH 111	Mathematics for Business and Economics I or	3
MTH 112	Mathematics for Business and Economics II or	
MTH 130	Business Mathematics	
		15
SEMESTER III		
ACC 202	Principles of Accounting II	3
BUS 234	Business Law	3
ECO 201	Principles of Economics I	3
PSY 131	Human Relations	3
† Elective		3
		15
SEMESTER IV		
MGT 242	Personnel Administration	3
BUS 237	Organizational Behavior	3
ECO 202	Principles of Economics II	3
OFC 231	Business Communications	3
Social Science elective or Humanities elective		3
† Elective		3
		18
Minimum Hours Required:		63

† Electives — May be selected from the following:

MGT 137	Principles of Retailing	3
MGT 153	Small Business Management	3
MGT 212	Special Problems in Business	1
MGT 230	Salesmanship	3
MGT 233	Advertising and Sales Promotion	3
OFC 160	Office Machines	3
OFC 172	Beginning Typing	3

* Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.

MANAGEMENT CAREERS — ADMINISTRATIVE MANAGEMENT OPTION

(Associate Degree)

The Administrative Management option offers a continuation of the traditional management and business studies. This option is designed for students seeking a detailed examination of management practices, techniques, and theories.

		CREDIT HOURS
SEMESTER I		
MGT 136	Principles of Management	3
BUS 105	Introduction to Business	3
COM 131	Applied Composition and Speech*	3
HUM 101	Introduction to the Humanities	3
† Elective		3
		15
SEMESTER II		
MGT 206	Principles of Marketing	3
ACC 201	Principles of Accounting I**	3
COM 132	Applied Composition and Speech*	3
CS 175	Introduction to Computer Science	3
MTH 111	Mathematics for Business and Economics I or	3
MTH 112	Mathematics for Business and Economics II or	
MTH 130	Business Mathematics	
		15
SEMESTER III		
ACC 202	Principles of Accounting II	3
BUS 234	Business Law	3
ECO 201	Principles of Economics I	3
PSY 131	Human Relations	3
† Elective		3
		15
SEMESTER IV		
MGT 242	Personnel Administration	3
BUS 237	Organizational Behavior	3
ECO 202	Principles of Economics II	3
OFC 231	Business Communications	3
Social Science elective or Humanities elective		3
† Elective		3
		18
Minimum Hours Required:		63

† Electives — May be selected from the following:

MGT 137	Principles of Retailing	3
MGT 153	Small Business Management	3
MGT 212	Special Problems in Business	1
MGT 230	Salesmanship	3
MGT 233	Advertising and Sales Promotion	3
OFC 160	Office Machines	3
OFC 172	Beginning Typing	3

* Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.

** Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.

MANAGEMENT CAREERS — PURCHASING MANAGEMENT OPTION

(Associate Degree)

This option is designed to develop the fundamental skills and knowledge which enable individuals to assume technical and decision making positions within the purchasing function of profit and non-profit organizations.

		CREDIT HOURS
SEMESTER I		
MGT 136	Principles of Management	3
MGT 160	Principles of Purchasing	3
BUS 105	Introduction to Business	3
COM 131	Applied Composition and Speech*	3
MTH 111	Mathematics for Business and Economics I or	3
MTH 112	Mathematics for Business and Economics II or	
MTH 130	Business Mathematics	
		15
SEMESTER II		
MGT 220	Materials Management	3
ACC 201	Principles of Accounting I**	3
COM 132	Applied Composition and Speech*	3
HUM 101	Introduction to the Humanities	3
† Elective		3
		15
SEMESTER III		
MGT 206	Principles of Marketing	3
MGT 280	Industrial Management	3
CS 175	Introduction to Computer Science	3
ECO 201	Principles of Economics I	3
PSY 131	Human Relations	3
		15
SEMESTER IV		
MGT 224	Quality Assurance	3
BUS 234	Business Law	3
ECO 202	Principles of Economics II	3
Social Science elective or Humanities elective		3
† Elective		3
		15
Minimum Hours Required		60

† Electives — May be selected from the following:

MGT 230	Salesmanship	3
MGT 233	Advertising and Sales Promotion	3
ACC 202	Principles of Accounting II	3
BUS 237	Organizational Behavior	3
MTH 202	Introductory Statistics	3
OFC 231	Business Communications	3
TRT 287	Physical Distribution Management I	3

* Students may substitue ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.

** Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.

OFFICE CAREERS — ADMINISTRATIVE ASSISTANT OPTION

(Associate Degree)

The primary objective of the Administrative Assistant Option to the Office Careers Program is to prepare students for positions as assistants to administrators within public and private firms and agencies. Emphasis in this program is on the development of organizational and management skills in addition to basic office skills.

		CREDIT HOURS
SEMESTER I		
OFC 160	Office Machines*	3
‡ OFC 172	Beginning Typing** or	3
OFC 174	Intermediate Typing	(2)
ǂ COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
BUS 105	Introduction to Business	3
† Elective		3
		17-18
SEMESTER II		
‡ OFC 174	Intermediate Typing or	2
OFC 273	Advanced Typing	
OFC 162	Office Procedures	3
OFC 165	Introduction to Word Processing	3
CS 175	Introduction to Computer Science	3
MGT 136	Principles of Management	3
ǂ COM 132	Applied Composition and Speech	3
		17
SEMESTER III		
‡ OFC 273	Advanced Typing or	2
† Elective		
OFC 231	Business Communications	3
ACC 131	Bookkeeping I or	3
ACC 201	Principles of Accounting	
PSY 131	Human Relations or	3
PSY 105	Introduction to Psychology	
† Electives		6
		17
SEMESTER IV		
OFC 256	Office Management or	3
BUS 237	Organizational Behavior	
HUM 101	Introduction to Humanities	3
† Electives		9
		15
Minimum Hours Required:		66

†Electives — Must be taken from the following:

OFC	Any OFC course may be selected	
OFC 803/804	Cooperative Work Experience	3-4
ACC 132	Bookkeeping II	3
ACC 202	Principles of Accounting II	3
BUS 143	Personal Finance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
MGT 136	Principles of Management	3
MGT 242	Personnel Administration	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science	3
ECO 201	Principles of Economics I	3
SPE 105	Fundamentals of Public Speaking	3

‡Students may be placed in typing courses based on proficiency level determined by previous training, experience and/or placement tests.

ǂStudents may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. However, students must take SPE 105 as an elective when substituting ENG 101 and ENG 102.

*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160

**OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.

OFFICE CAREERS — GENERAL OFFICE

(Certificate)

The General Office Certificate Program is designed to provide the student with a basic working knowledge and skills in various office activities. A general knowledge of business concepts and procedures is provided.

		CREDIT HOURS
SEMESTER I		
OFC 160	Office Machines*	3
‡ OFC 172	Beginning Typing**	3
COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
† Electives		7
		19
SEMESTER II		
ACC 131	Bookkeeping I	3
BUS 105	Introduction to Business	3
CS 175	Introduction to Computer Science	3
† Electives		7
		16
Minimum Hours Required:		35

†Electives — Must be taken from the following.

OFC 103	Speedwriting Theory	4
OFC 104	Speedwriting Dictation	3
OFC 159	Beginning Shorthand	4
OFC 162	Office Procedures	3
OFC 165	Introduction to Word Processing	3
OFC 166	Intermediate Shorthand***	4
OFC 174	Intermediate Typing	2
OFC 231	Business Communications	3
ACC 132	Bookkeeping II	3
ACC 201	Principles of Accounting I	3
COM 132	Applied Composition and Speech	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
MGT 136	Principles of Management	3
BUS 234	Business Law	3
CS 250	Contemporary Topics in Computer Science	3
OFC 273	Advanced Typing	2
OFC 275	Secretarial Procedures	3
OFC 803	Cooperative Work Experience or	3
OFC 804	Cooperative Work Experience	(4)

‡Students who can demonstrate proficiency by previous training, experience or placement tests may substitute a course from the electives listed for the program.

*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.

**OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.

***OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

OFFICE CAREERS — GENERAL OFFICE

(Certificate — Office Clerical Emphasis)

		CREDIT HOURS
SEMESTER I		
OFC 160	Office Machines*	3
OFC 162	Office Procedures	3
‡ OFC 172	Beginning Typing**	3
COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
† Elective		3
		18
SEMESTER II		
OFC 165	Introduction to Word Processing	3
OFC 174	Intermediate Typing	2
OFC 231	Business Communications	3
ACC 131	Bookkeeping I	3
BUS 105	Introduction to Business	3
CS 175	Introduction to Computer Science	3
		17
Minimum Hours Required:		35

†Electives — Must be taken from the following:

OFC 103	Speedwriting Theory	4
OFC 104	Speedwriting Dictation	3
OFC 159	Beginning Shorthand	4
OFC 166	Intermediate Shorthand***	4
OFC 231	Business Communications	3
ACC 132	Bookkeeping II	3
ACC 201	Principles of Accounting I	3
COM 132	Applied Composition and Speech	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
MGT 136	Principles of Management	3
BUS 234	Business Law	3
CS 250	Contemporary Topics in Computer Science	3
OFC 273	Advanced Typing	2
OFC 275	Secretarial Procedures	3
OFC 803	Cooperative Work Experience or	3
OFC 804	Cooperative Work Experience	(4)

‡Students who can demonstrate proficiency by previous training, experience or placement tests may substitute a course from the electives listed for the program.

*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.
**OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.
***OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

OFFICE CAREERS — GENERAL OFFICE

(Certificate — Accounting Emphasis)

		CREDIT HOURS
SEMESTER I		
OFC 160	Office Machines*	3
‡ OFC 172	Beginning Typing**	3
ACC 131	Bookkeeping I or	3
ACC 201	Principles of Accounting I	
COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
† Elective		3
		18
SEMESTER II		
‡ ACC 132	Bookkeeping II or	3
† Elective		
BUS 105	Introduction to Business	3
CS 175	Introduction to Computer Science	3
† Electives		8
		17
Minimum Hours Required:		35

†Electives — Must be taken from the following:

OFC 103	Speedwriting Theory	4
OFC 104	Speedwriting Dictation	3
OFC 159	Beginning Shorthand	4
OFC 162	Office Procedures	3
OFC 165	Introduction to Word Processing	3
OFC 166	Intermediate Shorthand***	4
OFC 174	Intermediate Typing	2
OFC 231	Business Communications	3
ACC 132	Bookkeeping II	3
ACC 201	Principles of Accounting I	3
COM 132	Applied Composition and Speech	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
MGT 136	Principles of Management	3
BUS 234	Business Law	3
CS 250	Contemporary Topics in Computer Science	3
OFC 273	Advanced Typing	2
OFC 275	Secretarial Procedures	3
OFC 803	Cooperative Work Experience or	3
OFC 804	Cooperative Work Experience	(4)

‡Students who can demonstrate proficiency by previous training, experience or placement tests may substitute a course from the electives listed for the program.

‡ Required if ACC 131 was taken previously.

*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.
**OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.
***OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

OFFICE CAREERS — LEGAL SECRETARY OPTION

(Associate Degree)

The primary objective of this option is to prepare students to become competent legal secretaries, capable of performing office and clerical duties within public and private firms and agencies. Students enrolled in the program will have an opportunity to secure intensive training in basic skills. An Associate in Applied Arts and Sciences Degree is awarded for successful completion.

		CREDIT HOURS
SEMESTER I		
OFC 159	Beginning Shorthand or	
OFC 103	Speedwriting	4
OFC 160	Office Machines*	3
‡ OFC 172	Beginning Typing** or	3
OFC 174	Intermediate Typing	(2)
‡ COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
		15-16
SEMESTER II		
OFC 166	Intermediate Shorthand*** or	4
OFC 104	Speedwriting Dictation	(3)
‡ OFC 174	Intermediate Typing or	2
OFC 273	Advanced Typing	
OFC 162	Office Procedures	3
ACC 131	Bookkeeping I or	3
ACC 201	Principles of Accounting I	
BUS 105	Introduction to Business	3
‡ COM 132	Applied Composition and Speech	3
		17-18
SEMESTER III		
OFC 165	Introduction to Word Processing	3
OFC 167	Legal Terminology and Transcription	3
OFC 231	Business Correspondence	3
# OFC 266	Advanced Shorthand	4
OFC 273	Advanced Typing or	2
† Elective		(3)
CS 175	Introduction to Computer Science	3
		18-19
SEMESTER IV		
OFC 265	Word Processing Practices and Procedures	3
OFC 274	Legal Office Procedures	3
OFC 275	Secretarial Procedures or	3
OFC 803	Cooperative Work Experience or	
OFC 804	Cooperative Work Experience	(4)
HUM 101	Introduction to Humanities	3
PSY 131	Human Relations or	3
PSY 105	Introduction to Psychology	
		15-16
Minimum Hours Required:		67

†Electives — Must be taken from the following:

OFC	Any OFC course may be selected	
OFC 803/804	Cooperative Work Experience	3-4
ACC 132	Bookkeeping II	3
ACC 202	Principles of Accounting II	3
BUS 143	Personal Finance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
MGT 136	Principles of Management	3
MGT 242	Personnel Administration	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science & Data Processing	4
ECO 201	Principles of Economics I	3
‡ SPE 105	Fundamentals of Public Speaking	3

‖Students may be placed in typing courses based on proficiency level determined by previous training, experience and/or placement tests.

‡ Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. However, students must take SPE 105 as an elective when substituting ENG 101 and ENG 102.

If OFC 103 and OFC 104 are taken, an approved elective may be substituted.

*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.
**OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.
***OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

OFFICE CAREERS — PROFESSIONAL SECRETARY OPTION

(Associate Degree)

The primary objective of this option is to prepare students to become competent secretaries, capable of performing office and clerical duties within public and private firms and agencies. Students enrolled in the program will have an opportunity to secure intensive training in basic skills. An Associate in Applied Arts and Sciences Degree is awarded for successful completion.

		CREDIT HOURS
SEMESTER I		
OFC 160	Office Machines*	3
OFC 159	Beginning Shorthand or	4
OFC 103	Speedwriting	
‡ OFC 172	Beginning Typing** or	3
OFC 174	Intermediate Typing	(2)
‡ COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
		15-16
SEMESTER II		
OFC 166	Intermediate Shorthand*** or	4
OFC 104	Speedwriting Dictation	(3)
‡ OFC 174	Intermediate Typing or	2
OFC 273	Advanced Typing	
OFC 162	Office Procedures	3
ACC 131	Bookkeeping I or	3
ACC 201	Principles of Accounting I	
BUS 105	Introduction to Business	3
‡ COM 132	Applied Composition and Speech	3
		17-18
SEMESTER III		
OFC 165	Introduction to Word Processing	3
OFC 231	Business Correspondence	3
CS 175	Introduction to Computer Science	3
# OFC 266	Advanced Shorthand	4
PSY 131	Human Relations or	3
PSY 105	Introduction to Psychology	
OFC 273	Advanced Typing or	2
† Elective		(3)
		18-19
SEMESTER IV		
OFC 265	Word Processing Practices and Procedures	3
OFC 275	Secretarial Procedures or	3
OFC 803	Cooperative Work Experience or	
OFC 804	Cooperative Work Experience	(4)
HUM 101	Introduction to Humanities	3
† Electives		6-7
		15-17
Minimum Required Hours:		67

†Electives — Must be taken from the following:

OFC	Any OFC course may be selected	
OFC 803/804	Cooperative Work Experience	3-4
ACC 132	Bookkeeping II	3
ACC 202	Principles of Accounting II	3
BUS 143	Personal Finance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
MGT 136	Principles of Management	3
MGT 242	Personnel Administration	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science & Data Processing	4
ECO 201	Principles of Economics I	3
‡ SPE 105	Fundamentals of Public Speaking	3

‡Students may be placed in typing courses based on proficiency level determined by previous training, experience and/or placement tests.

‡ Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. However, students must take SPE 105 as an elective when substituting ENG 101 and ENG 102.

If OFC 103 and OFC 104 are taken, an approved elective may be substituted.

*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.
**OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.
***OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

SOCIAL WORK ASSOCIATE

(Associate Degree)

This program will develop competencies for students to enter employment in paraprofessional positions as social work associates in various social service agencies. The program combines human services courses and other studies with special emphasis given to actual social service agency involvement and work.

		CREDIT HOURS
SEMESTER I		
HS 131	Orientation to Human Services	3
ENG 101	Composition and Expository Reading	3
PSY 105	Introduction to Psychology	3
SOC 101	Introduction to Sociology	3
† Elective		3-4
		15-16
SEMESTER II		
ENG 102	Composition and Literature	3
PSY 201	Developmental Psychology	3
SOC 102	Social Problems	3
SOC 206	Introduction to Social Work	3
† Elective		3-4
		15-16
SEMESTER III		
HS 233	Counseling for the Paraprofessional	3
HS 244	Social Work Problems and Practices	3
HS 803	Cooperative Work Experience*	3
PSY 205	Psychology of Personality	3
SOC 203	Marriage and Family	3
		15
SEMESTER IV		
HS 235	Introduction to Mental Health	3
HS 245	Social Work Problems and Practices	3
HS 813	Cooperative Work Experience*	3
SOC 204	American Minorities	3
† Elective		3-4
		15-16
Minimum Hours Required:		60

† Electives — Must be selected from the following:

ANT 101	Cultural Anthropology	3
BIO 116	Biological Science	4
CD 140	Early Childhood Developement, 0-3 Years	3
GVT 201	American Government	3
GVT 202	American Government	3
HST 101	History of the United States	3
HST 102	History of the United States	3
HUM 101	Introduction to the Humanities	3
PEH 101	Fundamentals of Health	3
PEH 257	Advanced First Aid and Emergency Care	3
PSY 207	Social Psychology	3
RD 101	Effective College Reading	3
SOC 205	Introduction to Social Problems	3
SOC 231	Urban Social Problems	3
SPA 101	Beginning Spanish	4

* HS 703, HS 704, HS 713, HS 714, HS 802, HS 804, HS 812, HS 814, may be taken with consent of instructor.

SOCIAL WORK ASSOCIATE

(Certificate)

		CREDIT HOURS
SEMESTER I		
HS 131	Orientation to Human Services	3
COM 131	Applied Composition and Speech*	3
HD 107	Developing Leadership Behavior	3
PSY 131	Human Relations**	3
SOC 101	Introduction to Sociology	3
		15
SEMESTER II		
HS 233	Counseling for the Paraprofessional	3
HS 235	Introduction to Mental Health	3
HS 244	Social Work Problems and Practices	3
HS 703	Cooperative Work Experience	3
SOC 206	Introduction to Social Work	3
		15
Minimum Hours Required:		30

* English 101 may be substituted with the approval of the program coordinator.
** Psycology 105 may be substituted with the approval of the program coordinator.

TRAINING PARAPROFESSIONALS FOR THE DEAF

(Associate Degree)

This program is designed to train individuals at a paraprofessional level to work with the deaf. Course work will provide skills to work as an interpreter for the deaf, educational assistant, media specialist, aide with the multiply-handicapped, or house parent in residential schools.

		CREDIT HOURS
SEMESTER I		
TPD 140	Introduction to Deafness	3
TPD 141	Beginning Sign Language	4
TPD 142	Communication Theory	3
TPD 147	Language Development for the Deaf	3
TPD 148	Receptive Fingerspelling	1
ENG 101	Composition and Expository Reading	3
		17
SEMESTER II		
TPD 143	Intermediate Sign Language	4
TPD 145	Classroom Management or	3
† Elective		
TPD 146	The Deaf Adult	2
TPD 242	Media for the Deaf or	3
TPD 247	Special Problems in Deafness*	
ENG 102	Composition and Literature	3
		15
SEMESTER III		
TPD 240	Advanced Sign Language	4
TPD 247	Special Problems in Deafness* or	3
† Elective		
TPD 250	Reverse Interpreting	3
TPD 802	Cooperative Work Experience	2
Elective		3
		15
SEMESTER IV		
TPD 230	Ethics and Specifics of Interpreting	4
TPD 241	Audiometry	3
TPD 247	Special Problems in Deafness* or	3
† Elective		
TPD 248	Rehabilitation of the Multiply-Handicapped Deaf	3
TPD 251	Educational/Specialized Signs	4
TPD 803	Cooperative Work Experience	3
		21
Minimum Hours Required:		68

† Electives — Must be selected from the following:

HD 105	Basic Processes of Interpersonal Relationships	3
HD 106	Personal and Social Growth	3
PSY 105	Introduction to Psychology	3
PSY 201	Developmental Psychology	3

*TPD 247 may be repeated for credit as topics vary

TRAINING PARAPROFESSIONALS FOR THE DEAF

(Certificate)

This certificate program will offer training for working with the deaf in a range of occupational settings, with primary emphasis on those students in vocational training, educational environments and community agencies.

		CREDIT HOURS
SEMESTER I		
TPD 140	Introduction to Deafness	3
TPD 141	Beginning Sign Language	4
TPD 142	Communication Theory	3
TPD 147	Language Development for the Deaf	3
TPD 148	Receptive Fingerspelling	1
ENG 101	Composition and Expository Reading	3
		17
SEMESTER II		
TPD 143	Intermediate Sign Language	4
TPD 146	The Deaf Adult	2
TPD 247	Special Problems in Deafness or	3
† Elective		
TPD 248	Rehabilitation of the Multiply-Handicapped Deaf	3
ENG 102	Composition and Literature	3
		15
Minimum Hours Required:		32

† Electives — Must be selected from the following:

HD 105	Basic Processes of Interpersonal Relationships	3
HD 106	Personal and Social Growth	3
PSY 105	Introduction to Psychology	3
PSY 201	Developmental Psychology	3

TRANSPORTATION TECHNOLOGY

(Associate Degree)

The objectives of the Transportation Technology Program are to prepare trained entry-level manpower for the transportation industry of North Texas with the ability to advance into management positions such as traffic managers, terminal managers, safety specialists, ICC practitioners and other related areas.

		CREDIT HOURS
SEMESTER I		
TRT 144	Introduction to Transportation	3
TRT 146	Transportation and Traffic Management	3
BUS 105	Introduction to Business	3
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
MTH 130	Business Mathematics or	3
MTH 111	Mathematics for Business and Economics I	
		15
SEMESTER II		
TRT 145	Introduction to Rates and Tariffs	3
TRT 147	Economics of Transportation	3
TRT 713	Cooperative Work Experience or	3
† Elective		3
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
MGT 136	Principles of Management	3
		15
SEMESTER III		
TRT 240	Interstate Commerce Law I	3
TRT 249	Applied Rates and Tariffs	3
TRT 287	Physical Distribution Management I	3
TRT 803	Cooperative Work Experience or	3
† Elective		
ACC 201	Principles of Accounting I or	3
ACC 131	Bookkeeping I	
		15
SEMESTER IV		
TRT 241	Interstate Commerce Law II	3
TRT 288	Physical Distribution Management II	3
TRT 813	Cooperative Work Experience or	3
† Elective		
ACC 202	Principles of Accounting II or	
ACC 132	Bookkeeping II	3
‡ Business Elective		3
		15
Minimum Hours Required:		60

† Electives — Must be selected from Business Electives listed below or the following:

GVT 201	American Government	3
GVT 202	American Government	3
HD 107	Developing Leadership Behavior	3
HST 101	History of the United States	3
HST 102	History of the United States	3
MTH 112	Mathematics for Business and Economics II	3
SPE 105	Fundamentals of Public Speaking	3

‡ Business Elective — Must be selected from the following:

TRT 250	Studies in Transportation Technology*	1
ACC 205	Business Finance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
CS 175	Introduction to Computer Science	3
ECO 201	Principles of Economics I	3
ECO 202	Principles of Economics II	3
MGT 206	Principles of Marketing	3
OFC 160	Office Machines	3
OFC 172	Beginning Typing	3

*TRT 250 may be repeated with different emphasis for elective credit.

WELDING TECHNOLOGY

(Associate Degree)

The Welding Technology program is designed to prepare the student in the basic processes of oxyacetylene and arc welding plus many specialized welding applications as options to fit the specific needs of the student. In addition, instruction is offered in related support areas such as metallurgy, tooling, drafting, pattern layout and characteristics of materials. Thus, the program offers preparation for both entry level jobs as well as welding inspectors.

The student will be required to purchase a basic set of tools which will be used in class and later on the job. Tool lists will be given out by the instructor during the first week of classes.

		CREDIT HOURS
SEMESTER I		
WE 111	Oxyfuel I	2
WE 112	Oxyfuel II	2
WE 113	Shielded Metal Arc Welding I	2
WE 114	Shielded Metal Arc Welding II	2
DFT 182	Technician Drafting	2
MTH 195	Technical Mathematics	3
COM 131	Applied Composition and Speech	3
		16
SEMESTER II		
WE 115	Shielded Metal Arc Welding II	4
WE 117	General Metal Layout	3
WE 118	Welding Inspection and Quality Control	4
PSY 131	Human Relations	3
WE 703	Cooperative Work Experience or	3
† Elective		
		17
SEMESTER III		
WE 211	Gas Tungsten Arc Welding I	2
WE 212	Gas Tungsten Arc Welding II	2
WE 214	Gas Metal Arc Welding I	2
WE 215	Gas Metal Arc Welding II	2
WE 217	Basic Welding Metallurgy	3
PHY 131	Applied Physics	4
		15
SEMESTER IV		
WE 116	Shielded Metal Arc Welding IV	4
WE 213	Gas Tungsten Arc Welding III	4
WE 216	Gas Metal Arc Welding III	4
WE 219	Welding Design	3
† Elective		2
		17
Minimum Hours Required:		65

† Electives must be selected from the following:

ACC 131	Bookkeeping I
ACC 132	Bookkeeping II
GVT 201	American Government
MTH 111	Mathematics for Business and Economics
WE 218	Applied Welding Metallurgy
WE 220	Special Welding Application I

WELDING TECHNOLOGY

(Certificate)

		CREDIT HOURS
SEMESTER I		
WE 111	Oxyfuel I	2
WE 112	Oxyfuel II	2
WE 113	Shielded Metal Arc Welding I	2
WE 114	Shielded Metal Arc Welding II	2
WE 211	Gas Tungsten Arc Welding I	2
WE 212	Gas Tungsten Arc Welding II	2
WE 214	Gas Metal Arc Welding I	2
WE 215	Gas Metal Arc Welding II	2
		16
SEMESTER II		
WE 115	Shielded Metal Arc Welding III	4
WE 116	Shielded Metal Arc Welding IV	4
WE 117	General Metal Layout	3
WE 213	Gas Tungsten Arc Welding III*	4
WE 216	Gas Metal Arc Welding III*	4
		19
Minimum Hours Required:		35

* WE 704 Cooperative Work Experience may be substituted for WE 213 or WE 216.

VOCATIONAL NURSING

The Vocational Nursing Program is a twelve month program offered at Eastfield College under the administration and accreditation of the El Centro College Vocational Nursing Program. Students apply for admission to Eastfield College, attend classes at Eastfield College but receive their certificate of completion from El Centro College. The program is accredited by the Board of Vocational Nurse Examiners for the State of Texas. Upon completion of the program, the student may write the State Licensing Examination for Vocational Nurses, in order to become a Licensed Vocational Nurse (LVN).

The Vocational Nursing Program prepares individuals to give direct patient care under the supervision of a registered nurse or a physician. The program includes classroom and laboratory work on campus as well as clinical experience at various area hospitals. Students are admitted to the program in both the fall and spring semesters.

PROGRAM/COURSES		LEC. HOURS	LAB HOURS	CREDIT HOURS
SEMESTER I (Fall or Spring)				
BIO 123	Applied Anatomy & Physiology	3	2	4
DM 064	Math for Nurses	1	0	1
HD 100	Study Skills	1	0	1
VN 144	Health Maintenance through the Life Cycle	3	0	3
VN 145	Nursing Process I	3	0	3
VN 152	Nursing Practice	0	24	6
				18
SEMESTER II OR II (Summer Only)				
VN 153	Maternal Child Health	7	3	8
VN 154	Maternal Child Health Clinical	0	28	7
				15
SEMESTER III OR II (Fall or Spring)				
VN 155	Nursing Process II	8	4	10
VN 150	Clinical II	0	28	8
				18

Admission requirements include an orientation session, satisfactory scores on a pre-entrance examination, and completion of all requirements for admission as a full time student to the college.

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

	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Fire Protection Technology				x			
Food Service				x			
Dietetic Assistant & Technician				x			
Food Service Operations				x			
School Food Service				x			
Graphic Arts/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					
Management Careers	x	x	x	x	x	x	x
Administrative Management	x	x	x	x	x	x	x
Mid-Management	x	x	x	x	x	x	x
Purchasing Management			x			x	
Sales, Marketing & Retail Management	x	x					
Small Business Management		x		x	x	x	x
Medical				x			
Associate Degree Nursing	x*		x**	x		x**	x**
Dental Assisting Technology				x			
Medical Assisting Technology				x			
Medical Laboratory Technology				x			
Medical Transcription				x			
Radiography Technology				x			
Respiratory Therapy Technology				x			
Surgical Technology				x			
Vocational Nursing			x*	x		x*	
Motorcycle Mechanics		x					
Office Careers	x	x	x	x	x	x	x
Administrative Assistant	x	x	x	x	x	x	x
General Office Certificate	x	x	x	x	x	x	x
Insurance Certificate							x
Legal Secretary	x	x	x	x	x	x	x
Professional Secretary	x	x	x	x	x	x	x
Records Management	x	x		x			
Optical Technology						x	
Ornamental Horticulture Technology							x
Florist & Greenhouse Florist							x
Landscape Nursery & 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 & Advertising		x					
Fashion Marketing	x	x					
Small Engine Mechanics		x					
Social Work Associate			x				
Solar Energy Technology						x	
Training Paraprofessionals for the 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

* Programs are offered at the designated colleges through El Centro College.
** Second Year courses are offered at the designated colleges through El Centro College.

Notes

EASTFIELD COLLEGE
3737 MOTLEY DRIVE
MESQUITE, TEXAS 75150